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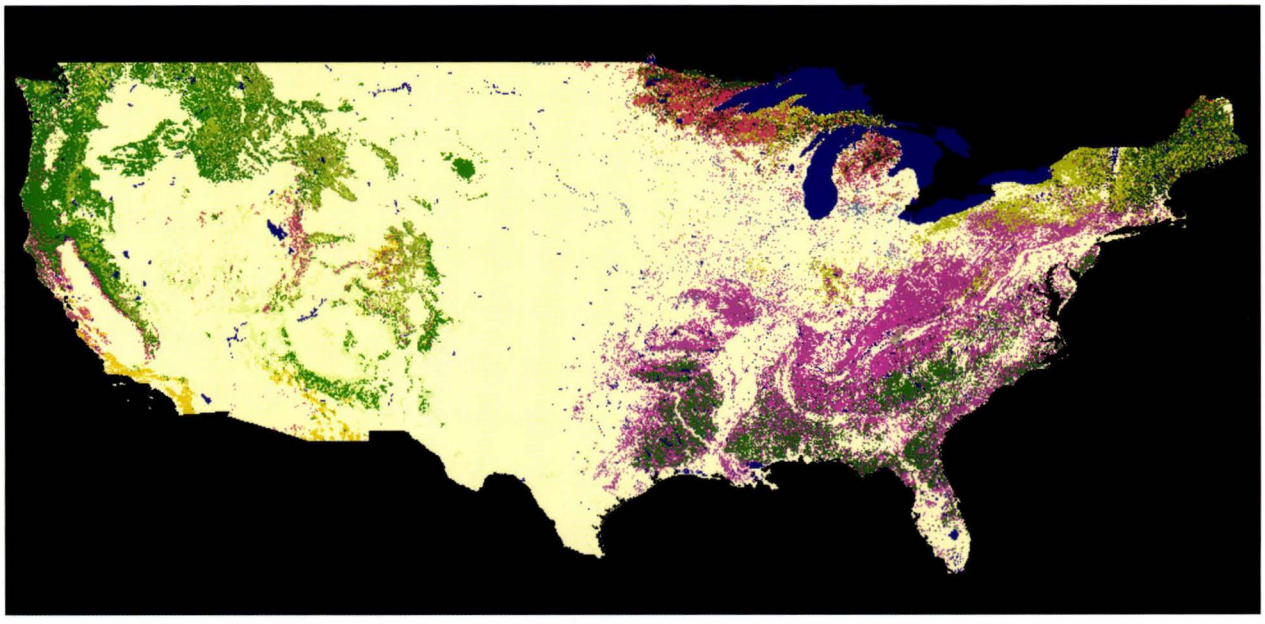
Report NC-242

RPA Data Wiz Users Guide, Version 1.0

Scott A. Pugh



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Visit the Knowledge Store at www.ncrs.fs.fed.us/pubs/ for CD-ROM copies of RPA DATA WIZ VERSION 1.0. Copies of the CD are also enclosed in the publication "Forest Resources of the United States, 2002" GTR-NC-241. This publication is available from North Central Station Distribution Center, Office of Communication, U.S. Department of Agriculture, Forest Service, One Gifford Pinchot Drive, Madison, WI 53726-2398, phone 608-231-9248.

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SUMMARY

RPA Data Wiz is a computer desktop application that allows users to customize summaries of Resource Planning Act (RPA) Assessment forest information. Summary tables, graphs, and choropleth maps can be produced with this software. A number of variables can be analyzed. Volumes for growing stock, live cull, dead salvable, netgrowth, and mortality can be estimated. Acreage, biomass, and tree count estimates are also available. Currently, removals are not available in this software. RPA Data Wiz is available in English and metric versions. This software was developed using Microsoft Visual Basic 6.0 (SP5), Microsoft ADO, Microsoft ADOX, Microsoft Windows Common Controls 6.0 (SP5), Microsoft Hierarchical FlexGrid Control 6.0 (SP4), Microsoft Common Dialog Control 6.0, Microsoft Chart Control 6.0 (SP4 OLEDB), ESRI MapObjects LT 2.0 (2000), a Microsoft Access 2000 database, several ESRI ArcView shapefiles, and a number of other minor components.

Use of product and/or trade names does not constitute endorsement by the U.S. Department of Agriculture, Forest Service.

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Chapter 1
Before You Begin

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The RPA Data Wiz Users Guide contains detailed information about querying Resource Planning Act (RPA) Assessment forest data to produce summary tables, graphs, and maps. A number of variables can be analyzed (appendix A, B, C). Volumes for growing stock, live cull, dead salvable, netgrowth, and mortality can be estimated. Acreage, biomass, and tree count estimates are also available. Currently, removals are not available in this software. RPA Data Wiz is available in English and metric versions. This software was developed using Microsoft Visual Basic 6.0 (SP5), Microsoft ADO, Microsoft ADOX, Microsoft Windows Common Controls 6.0 (SP5), Microsoft Hierarchical FlexGrid Control 6.0 (SP4), Microsoft Common Dialog Control 6.0, Microsoft Chart Control 6.0 (SP4 OLEDB), ESRI MapObjects LT 2.0 (2000), Microsoft Access 2000 databases, several ESRI ArcView shapefiles, and a number of other minor components. RPA Data Wiz is available on CD by request from the North Central Research Station, St. Paul, MN (http://www.ncrs.fs.fed.us/4801/tools-data/mapping-tools/rpa-data-wiz.asp).

This version of RPA Data Wiz uses the 2002 RPA Assessment. Most of the data comes from the Forest Inventory and Analysis (FIA) program. (http://www.fia.fs.fed.us/, http://www.ncrs.fs.fed.us/4801/tools-data/data; *The Forest Inventory and Analysis Database: Database Description and Users Manual Version 1.0*, Miles *et al.* 2001) Other parts of the data come from lands administered by the National Forest System in California, Colorado, Idaho, Nevada, Oregon, Washington, and Wyoming. RPA Data Wiz has no information for Hawaii or interior Alaska. In addition to the information provided in this users guide, a description of the 2002 RPA data can be found in *The 2002 RPA Plot Summary Database Users Manual Version 1.0* (Miles and Vissage, In prep.).

The users guide begins with instructions for installing and removing RPA Data Wiz. Next, it provides some general guidance for running RPA Data Wiz (Chapter 2). Chapters 3 through 5 cover the fine details of running each part of the application. A tutorial chapter follows. You may wish to skip Chapters 3 through 5 and proceed to Chapter 6. Finally, several appendices define selection and output variables in RPA Data Wiz.

RPA Data Wiz is available on CD by request from the North Central Research Station, St. Paul, MN (http://www.ncrs.fs.fed.us/4801/tools-data/mapping-tools/rpa-data-wiz.asp).

Typographic Protocol

Most of the time this manual presents information in paragraph form. It tries to thoroughly cover important aspects of each topic. Otherwise, bullets or numbered steps are used to present the information. When reading this manual, keep in mind the following typographic protocol:

Example	Description
Start \ Programs \ RPA Data Wiz	Bold words should be chosen, typed, or acknowledged. A backslash between bold words indicates a series of choices should be made.
multiple variable sums table	Italicized words indicate a defined item or term.
CTRL + S	Capitalized letters usually indicate keyboard keys. The + sign indicates multiple keys should be pressed at the same time.
Tables and Graphs	Capitalized words indicate the name of a menu, dialog, button, or other object in Windows or RPA Data Wiz.
"Installation"	Words in quotation marks may be a reference to a specific section in the RPA Data Wiz Users Guide.

System Requirements

Your computer must have one of the following operating systems:

- Windows 95
- Windows 98
- Windows NT 4.0 (need system administrator privileges to install)
- Windows 2000 (need system administrator privileges to install)
- Windows XP (need system administrator privileges to install)

Your computer must have the following:

- CD-ROM or DVD-ROM drive
- Microsoft Internet Explorer Version 5.0 or higher
- Total minimum of 848 MB of disk space for one version (1,030 MB for both versions)
    - Minimum of 318 MB of hard disk space before installation (500 MB to install English and metric versions)
    - Minimum of 530 MB of hard disk to run RPA Data Wiz after installation

The following items are recommendations, but are not essential:

- Minimum of 200 MB of virtual memory
- Minimum of 512 MB of RAM
- Minimum of a Pentium III processor
- Minimum of a 14-inch computer monitor

As previously mentioned, there is an English and a metric version of RPA Data Wiz. Each employs a different Microsoft Access database. The English version uses RPADb2002.mdb, which occupies approximately 183 MB; the metric version uses RPADb2002met.mdb, which occupies approximately 166 MB. The installation package allows you to install one or both of these versions. In addition to the databases, other support files are installed. If both versions are installed, the total package will require approximately 500 MB of storage space (approximately 318 MB of space for one database). Temporary files are created while running RPA Data Wiz. Theoretically, the temporary files could occupy about 530 MB of additional space. RPA Data Wiz will run more efficiently when sufficient virtual memory is allocated. We recommend that the maximum amount of virtual memory be set to at least 200 MB. This amount is set in Control Panel \ System Properties \ Virtual Memory. We recommend at least 512 MB of RAM and a Pentium III or faster processor. More RAM and faster processors will decrease the processing time of RPA Data Wiz. These are only recommendations and RPA Data Wiz will run on slower computers. Remember that a slower computer could take hours to produce a complicated table using all the RPA data available for the United States (there is a Stop button available).

Sometimes headings in the output tables, graphs, and maps can be quite long. On smaller computer monitors (e.g., 12 or 14 inches), some headings can be cut off if you are using a coarse monitor resolution (e.g., 640 X 480 or 800 X 600). If this is a problem, increase the resolution of the computer monitor.

1. Select **Start \ Settings \ Control Panel**.
2. Choose **Display**.
3. Select **Settings** in the Display Properties dialog.
4. Increase the resolution of the monitor to 1,024 X 768 or higher.
5. Select **Apply** and accept the settings.
6. Close the **Display Properties** dialog and the **Control Panel** form.

Installation

If you do not have Windows XP, you should read "Installation – Discussion and Notes" before executing the following general installation instructions (focus on reading the notes that pertain to your operating system). Follow these steps after you have covered the previous material or have determined that you have Windows XP. Use **system administrator privileges** while loading in Windows NT 4.0, Windows 2000, or Windows XP. Make sure programs like anti-virus software are not running. In general, insert the RPA Data Wiz CD into your CD-ROM drive and execute the setup application, setup.exe. If the installation program does not automatically start, then you will have to run setup.exe manually. Here is one way to run setup.exe.

1. On the desktop, double-click **My Computer**.
2. Double-click the icon for the CD-ROM drive.
3. Double-click **setup.exe** (computer icon is usually associated with this file).

Here is a second way to run setup.exe.

1. Select **Start \ Run**.
2. In the Open input box, type the path to the setup.exe file on your CD-ROM drive plus "setup.exe" (e.g., D:\setup.exe).
3. Click **OK**.

After the setup program starts, follow the directions.

1. Make sure other programs like anti-virus software are not running. Click **OK** to accept the message.
2. Keep the default installation directory or click **Change Directory** to place RPA Data Wiz in an alternate location. Remember that the directory for output from RPA Data Wiz will be in a directory, temp, within the directory specified here. Click the computer icon to install RPA Data Wiz in the specified directory.

3. Click the option indicating your choice of database(s). Click **Done Selecting Databases(s)**.
4. Choose a group name or create a new one. We recommend using the default group name "RPA Data Wiz." If the default is chosen, then RPA Data Wiz will show up in Start \ Programs. We do not recommend chosing Startup, because this will start RPA Data Wiz every time the computer boots up. Click **Continue**.
5. The components will be installed.

If you are installing as system administrator, you may want to create a shortcut to RPA Data Wiz for other login accounts.

1. Select **Start \ Settings**.
2. Choose **Taskbar & Start Menu... \ Advanced \ Add**.
3. Now **Browse** to the RPA Data Wiz application file, RPA_Data_Wiz.exe. The file is in the installation directory you chose earlier, usually in C:\ProgramFiles\RPA Data Wiz\. Click **RPA_Data_Wiz.exe**.
4. Click **Next** and the location where you wish the shortcut to appear. Click **Next \ Finish**. Finally, click **OK** on the Taskbar and Start Menu Properties dialog.

Installation – Discussion and Notes

Either Microsoft Windows 95, Windows 98, Windows NT 4.0, Windows 2000, or Windows XP with the appropriate updates and Microsoft Internet Explorer version 5.0 or higher are required to run RPA Data Wiz. RPA Data Wiz is not supported in Windows 3.1, Windows NT 3.51, or older systems. Windows ME is not supported. Most computers will have the necessary components to install and run this application. However, there is wide variability among the Windows operating systems present on computers. Some users will have to install updates to their operating systems. The setup program installs Microsoft Data Access Components (MDAC) 2.5 SP2 (2.52.6019.2) on Windows 95, 98, and NT 4.0. The setup program cannot install MDAC on Windows 2000 machines. Windows 2000 service pack 2 or newer is required to install MDAC on a Windows 2000 operating system. Windows XP already has the necessary MDAC. MDAC includes Microsoft Jet 4.0 (SP5). The MDAC End-User License Agreement (EULA) is found on the installation CD in the Windows_Support directory. The setup program installs other Microsoft support files, MapObjects LT 2.0 (ESRI 2000) components, Microsoft Access database files, map layers as ArcView shapefiles, the RPA Data Wiz application file, and supporting documentation. In rare instances, the installation process may require a reboot after some system files are updated. If necessary, the setup program will indicate the required reboot. If a reboot is required to update system files, then the RPA Data Wiz setup program must be run a second time. The following list contains information critical to installing RPA Data Wiz in specific Windows operating systems:

The most recent version of DCOM for Windows 95 may be found at http://www.microsoft.com/com/resources/downloads.asp.

Microsoft Windows 95

The Distributed Component Object Model (DCOM) must be installed on Windows 95 operating systems. A number of applications (e.g., Microsoft Internet Explorer 4.01 and 5.0) install DCOM automatically, so it may be present on your machine. DCOM can be detected on your system if a search of the registry keys contains {bdc67890-4fc0-11d0-a805-00aa006d2eaf4}. This does not mean you have the latest version of DCOM. The latest version at the time of this writing is DCOM95 version 1.3. This can be found on the installation CD in the Windows_Support directory of this application as dcom95.exe. The DCOM95 version 1.3 EULA can also be found on the CD. The most recent version of DCOM for Windows 95 may be found at http://www.microsoft.com/com/resources/downloads.asp. We recommend you do not work with the registry. If DCOM is not installed, the RPA Data Wiz application will issue an error and fail to run. This is the easiest way to determine if DCOM is not installed. If the RPA Data Wiz installation fails, then install DCOM (copy **dcom95.exe** from the Windows_Support\dcom95 directory of the installation CD to your machine and execute the file). You will have to reinstall RPA Data Wiz, but first uninstall the previous RPA Data Wiz installation (see "Uninstalling RPA Data Wiz" later in this chapter).

MDAC 2.5 service pack 2 installs with the RPA Data Wiz setup program. MDAC 2.5 service pack 2 will not install if a newer version of MDAC exists on your machine. Although it's unlikely, a previous user could have installed a newer version of MDAC like 2.6 or 2.7. These versions do not come with the Jet 4.0 components required by RPA Data Wiz. More than likely, some other program has already installed the Jet components on your machine. However, if they do not exist, then RPA Data Wiz will not connect to the required Microsoft Access database. In this case, RPA Data Wiz will give errors indicating that it cannot connect to the database. You will have to install Jet 4.0 service pack 3.0 (http://www.microsoft.com/data/download.htm) at a minimum. Jet 4.0 service pack 3.0 is also available on the CD in the Windows_Support directory. After installing Jet 4.0 service pack 3.0, you have the option to upgrade to the latest service pack.

Microsoft Windows 98

The most recent version of DCOM for Windows 98 may be found at http://www.microsoft.com/com/resources/downloads.asp.

The Distributed Component Object Model (DCOM) must be installed on Windows 98 operating systems. DCOM comes on Windows 98 Second Edition. A number of applications (e.g., Microsoft Internet Explorer 5.0, Microsoft Visual Studio 6.0, Microsoft Office 2000) install DCOM automatically, so it may be present on your machine. DCOM can be detected on your system if a search of the registry keys contains {bdc67890-4fc0-11d0-a805-00aa006d2eaf4}. This does not mean you have the latest version of DCOM. The latest version at the time of this writing is DCOM98 version 1.3. The most recent version of DCOM for Windows 98 may be found at http://www.microsoft.com/com/resources/downloads.asp. Microsoft does not allow redistribution of DCOM98 so it is not available on the installation CD. We recommend you do not work with the registry. If DCOM is not installed, the RPA Data Wiz application will issue an error and fail to run. This is the easiest way to determine if DCOM is not installed. If the RPA Data Wiz installation fails, then install DCOM (double-click the DCOM file). You will have to reinstall RPA Data Wiz, but first uninstall the previous RPA Data Wiz installation (see "Uninstalling RPA Data Wiz" later in this chapter).

MDAC 2.5 service pack 2 installs with the RPA Data Wiz setup program. MDAC 2.5 service pack 2 will not install if a newer version of MDAC exists on your machine. Although it's unlikely, a previous user could have installed a newer version of MDAC like 2.6 or 2.7. These versions do not come with the Jet 4.0 components required by RPA Data Wiz. More than likely, some other program has already installed the Jet components on your machine. However, if they do not exist, then the RPA Data Wiz will not be able to connect the Microsoft Access database. In this case, RPA Data Wiz will give errors indicating that it cannot connect to the database. You will have to install Jet 4.0 service pack 3.0 (http://www.microsoft.com/data/download.htm) at a minimum. Jet 4.0 service pack 3.0 is available on the installation CD in the Windows_Support directory. After installing Jet 4.0 service pack 3.0, you have the option to upgrade to the latest service pack.

Microsoft Windows NT 4.0

DCOM is already installed on Windows NT 4.0. Run the RPA Data Wiz setup program. If system files are updated, then a reboot and a second run of the setup program will be required.

MDAC 2.5 service pack 2 installs with the RPA Data Wiz setup program. MDAC 2.5 service pack 2 will not install if a newer version of MDAC exists on your machine. Although it's unlikely, a previous user could have installed a newer version of MDAC like 2.6 or 2.7. These versions do not come with the Jet 4.0 components required by RPA Data Wiz. More than likely, some other program has already installed the Jet components on your machine. However, if they do not exist, then RPA Data Wiz will not connect to the required Microsoft Access database. In this case, RPA Data Wiz will give errors indicating that it cannot connect to the database. You will have to install Jet 4.0 service pack 3.0 (http://www.microsoft.com/data/download.htm) at a minimum. Jet 4.0 service pack 3.0 is also available on the installation CD in the Windows_Support directory. After installing Jet 4.0 service pack 3.0, you have the option to upgrade to the latest service pack.

Microsoft Windows 2000

DCOM is already installed on Windows 2000. The Windows 2000 operating system must have service pack 2 or newer. Service packs may be found at http://www.microsoft.com/windows2000/downloads/servicepacks/default.asp. Check the service pack on your system in **My Computer \ Properties**. Click the **General** tab and look under **System**. After verifying that service pack 2 or newer is installed, run the RPA Data Wiz setup program. System files cannot be updated on this operating system without installing service packs or other Microsoft software updates. Run the RPA Data Wiz setup program. If you try installing and get a message indicating that some of your system files are out of date, then you do not have service pack 2 or newer installed.

Microsoft Windows XP

Windows XP has the necessary system files for the RPA Data Wiz setup program. Run the RPA Data Wiz setup program.

Uninstalling RPA Data Wiz

You may want to uninstall RPA Data Wiz. If you run into trouble and RPA Data Wiz does not install correctly, the safest thing to do is uninstall the application. RPA Data Wiz can be installed again later. When uninstalling RPA Data Wiz we recommend you do not remove shared files. Here are the steps for uninstalling RPA Data Wiz.

1. Select **Start \ Settings \ Control Panel**.
2. Choose **Add/Remove Programs**.
3. Look for and select **RPA Data Wiz**.
4. Select **Change/Remove**.
5. Select **Yes** to remove the application.
6. If you are asked to remove shared files, we highly recommend you do not remove them.

References

A number of references are associated with map layers in RPA Data Wiz. Some of the map layers were created by manipulating other original map layers. The references directory of the installation CD has the references for the original map layers. See **readme.txt** in the references directory for further information. The RPA Data Wiz application directory (usually C:\Program Files\RPA Data Wiz\) has the reference information or metadata for each of the final map layers used in RPA Data Wiz. These files have "met" extensions and can be read in a text editor. The references directory on the installation CD also has the original references for the rural urban continuum and Baileys' ecological subregion codes.

Chapter 2
Getting Started with RPA Data Wiz

RPA Data Wiz allows users to create tables, graphs, and maps of the forest information from the 2002 RPA Assessment database without having to know the structure of the database and without having to know computer programming or *Structured Query Language* (*SQL* is a standard ANSI / NCITS language for querying and manipulating databases). Pointing and clicking in the graphical user interface works to achieve most results. A user performs the following basic steps:

1. Pick one or more RPA subregions to work in. All RPA plot information is initially chosen for the subregions you pick.
2. Narrow your selection of RPA plot information by picking variables and their respective values of interest. For example, you could choose only to work with oak forest types on timberland.
3. Make summary tables, graphs, and maps on the resulting information.
4. Save your tables, graphs, and maps in a number of formats to use in other applications.
5. Repeatedly add to or select from your existing RPA plot information and create more output.

Answering Questions

You can answer many questions with RPA Data Wiz—a small sample is included below. Not all of these questions are answered directly in this users guide, but the guide presents methods that allow you to answer these questions and more. In the examples below, geographic units can be RPA assessment regions or subregions, States, counties, Baileys' Ecosections, 107th or 108th Congressional Districts, USGS Hydrological Accounting Units, or U.S. National Forest System lands. Volumes can be for growing stock, live cull, dead salvable, netgrowth, or mortality.

- What is the biomass, volume, or number of trees on a per area basis?
- What is the ratio of mortality to netgrowth?
- What is the ratio of softwood to hardwood?
- What is the ratio of large trees to all trees?
- What is the ratio of forest land or timberland to all land by geographic unit?
- What is the ratio of National Forest System timberland to private timberland (derive indirectly using output from RPA Data Wiz in a spreadsheet)?
- What is the ratio of productive reserved forest land to productive nonreserved forest land by forest type and age class (derive indirectly using output from RPA Data Wiz in a spreadsheet)?
- What geographic units have overstocked forest stands and how much biomass is present in these areas (may indicate fire hazard)?
- What is the volume, biomass, or number of trees in highly productive black walnut stands?
- What is the volume, biomass, or number of trees by owner and stand-diameter class?
- What is the volume, biomass, or number of trees by age and stand-size class?
- What is the volume, biomass, or number of trees in planted versus natural forest stands?
- How much stand conversion, clearcutting, or other type of treatment has occurred in each geographic unit?
- What is the volume, biomass, or number of trees associated with counties that have various levels of rural/urban continuums (levels of metropolitan or urban development)?
- What geographic units have potentially favorable habitat for a particular animal species of interest?

Important Points

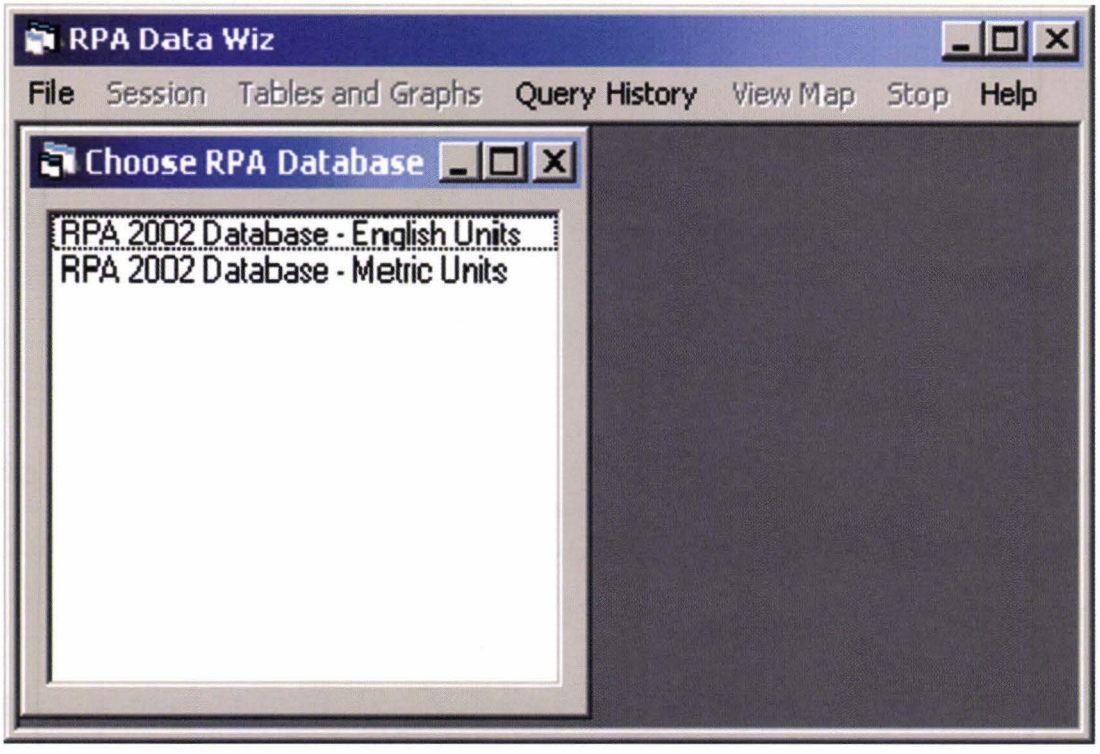
Before covering specific methods and examples of output, there are several important points to remember when using RPA Data Wiz.

- Many times throughout this application, multiple selections are allowed. Unless noted otherwise, hold SHIFT and click over a range of choices or hold CTRL and click on multiple individual choices. One of these noted exceptions occurs when creating tables and picking grouping variables.
- Remember that choices in menus or dialogs are only enabled or available when they appear in text that contrasts with the background (e.g., black text on the gray menu).
- The abbreviations "SW" and "HW" represent softwood and hardwood respectively throughout RPA Data Wiz.
- "AEF" occurs in the output tables and represents area (appendices B and C).
- Make sure your form sizes are maximized to see the graphs well (click on the box in upper right-hand corner of each form to maximize the size).
- Since the data were acquired from a number of sources using various sampling techniques, there is no easy way to present sampling errors. The number of plots or records associated with a query is the only measure of accuracy provided. Most of the data in the 2002 RPA Assessment do come from the FIA program. A description of the FIA sampling and accuracy standards can be found in *The Forest Inventory and Analysis Database: Database Description and Users Manual Version 1.0* (Miles *et al.* 2001).
- Area is the only attribute information that can be output for nonforest and water plots. Otherwise, all the output information in RPA Data Wiz is associated with some type of forest land. Therefore, you will usually limit your selections to some type of forest land (see Land Cover Class and Forested Land Code in appendix A).
- Time series analysis is not part of RPA Data Wiz. The database is a "snapshot" of the most up-to-date information. A small amount of this latest information is decades old. Source Date (appendix A) indicates the year of the information.
- Information on individual tree species is not part of RPA Data Wiz. Forest Type Group and Local Forest Type are available (appendix A).
- Number of trees and board-foot volume (appendix B) are only available for timberland (see Forested Land Code in appendix A). In addition, board-foot volume is only available in the English version of RPA Data Wiz.
- Finally, the structure of this application is very autonomous, allowing users a great degree of freedom to pick specific RPA information and present it in many ways. Take care to make selections and create output in ways that make sense. As an aide, we recommend looking over the definitions of the selection and output variables in the appendices.

Starting RPA Data Wiz

There are a number of ways to start RPA Data Wiz, depending upon how you installed the application. If the defaults were selected during installation, then RPA Data Wiz will show up in Start \ Programs. Select **Start \ Programs \ RPA Data Wiz**. You may have created a shortcut to the application. If this is the case, double-click the shortcut. Otherwise, go to the installation directory and double-click the RPA Data Wiz application file, **RPA_Data_Wiz.exe**.

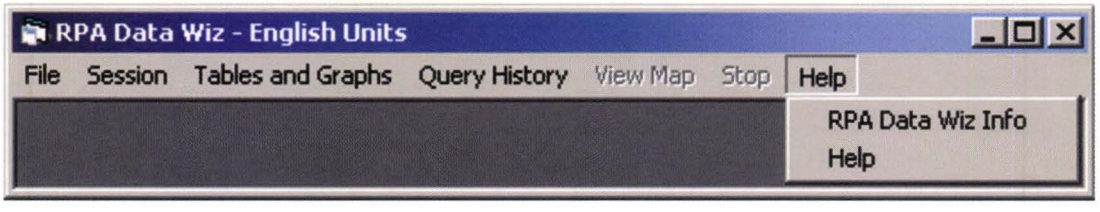
After starting the application, a splash screen will appear. Click in the gray area of this screen to proceed. If you installed the English and metric databases, then you will have to decide whether to work with the English or metric version of RPA Data Wiz.


RPA Data Wiz
File Session Tables and Graphs Query History View Map Stop Help
Choose RPA Database
RPA 2002 Database - English Units
RPA 2002 Database - Metric Units

Any future updates to RPA Data Wiz will be located at http://www.ncrs.fs.fed.us/4801/tools-data/mapping-tools/rpa-data-wiz.asp.

Help

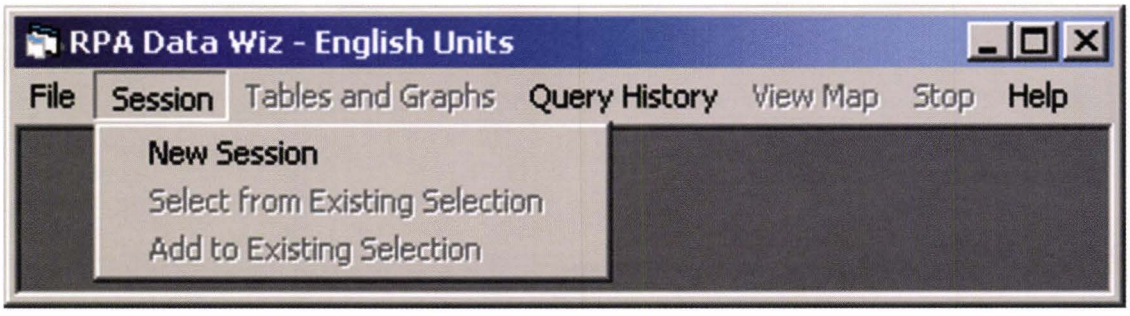
Select **Help \ RPA Data Wiz Info** to display reference information on RPA Data Wiz. Select **Help \ Help** and you will be referred to the RPA Data Wiz Users Guide. In this version, there is no help section built into the program. However, tool tips appear for a number of objects in RPA Data Wiz. Momentarily place the cursor over an object to see if a tool tip is available. Most menus do not have tool tips. Just click on the menu to see what is available. Any future updates to RPA Data Wiz will be located at http://www.ncrs.fs.fed.us/4801/tools-data/mapping-tools/rpa-data-wiz.asp.



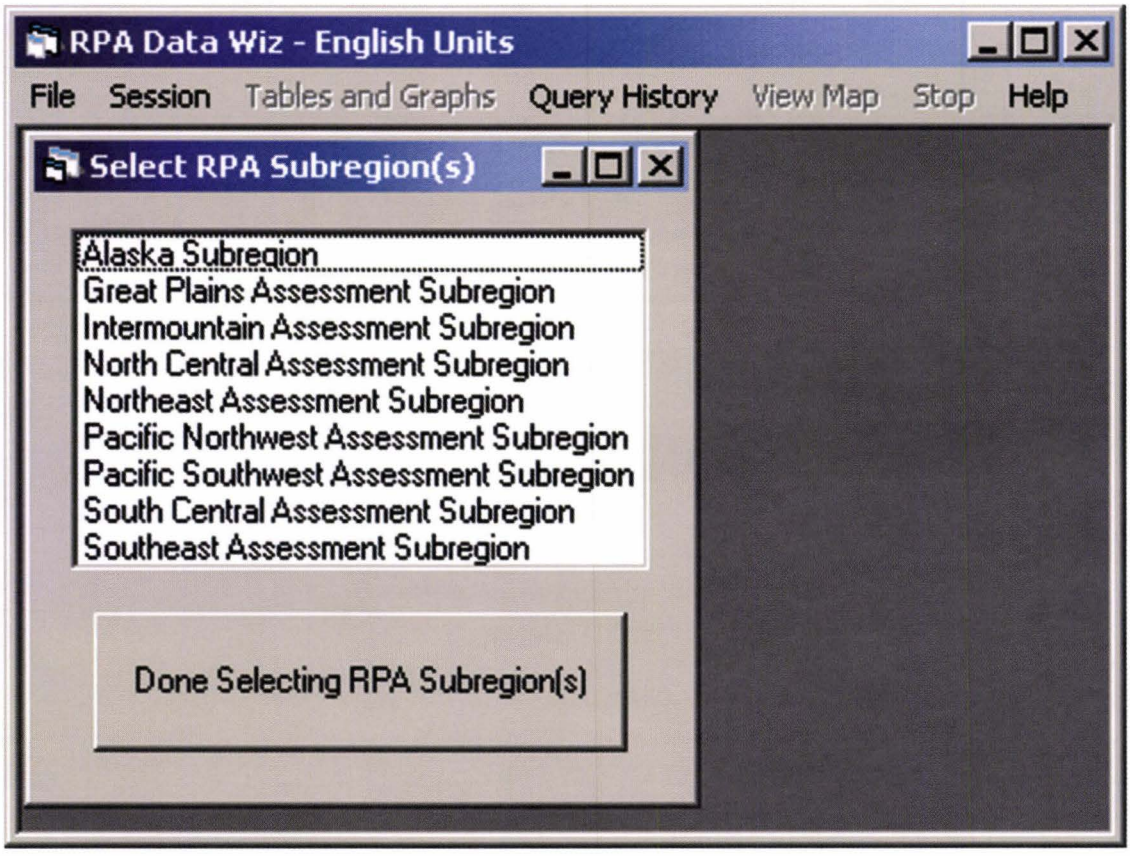
Chapter 3
Working with Sessions

New Session

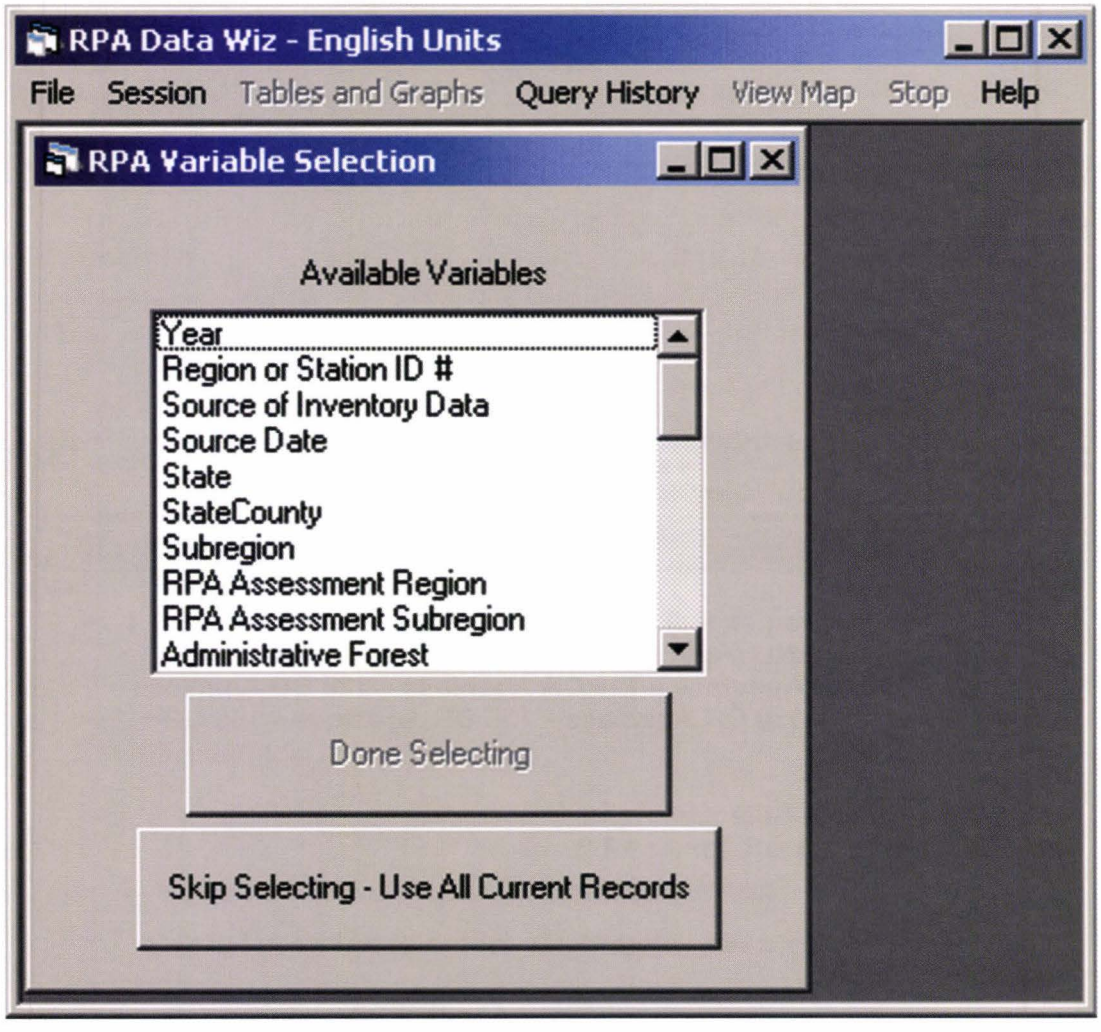
You can start a new session in many different stages throughout the application. Right after starting RPA Data Wiz, you have to start a new session. Start a new session by clicking **Session \ New Session**.

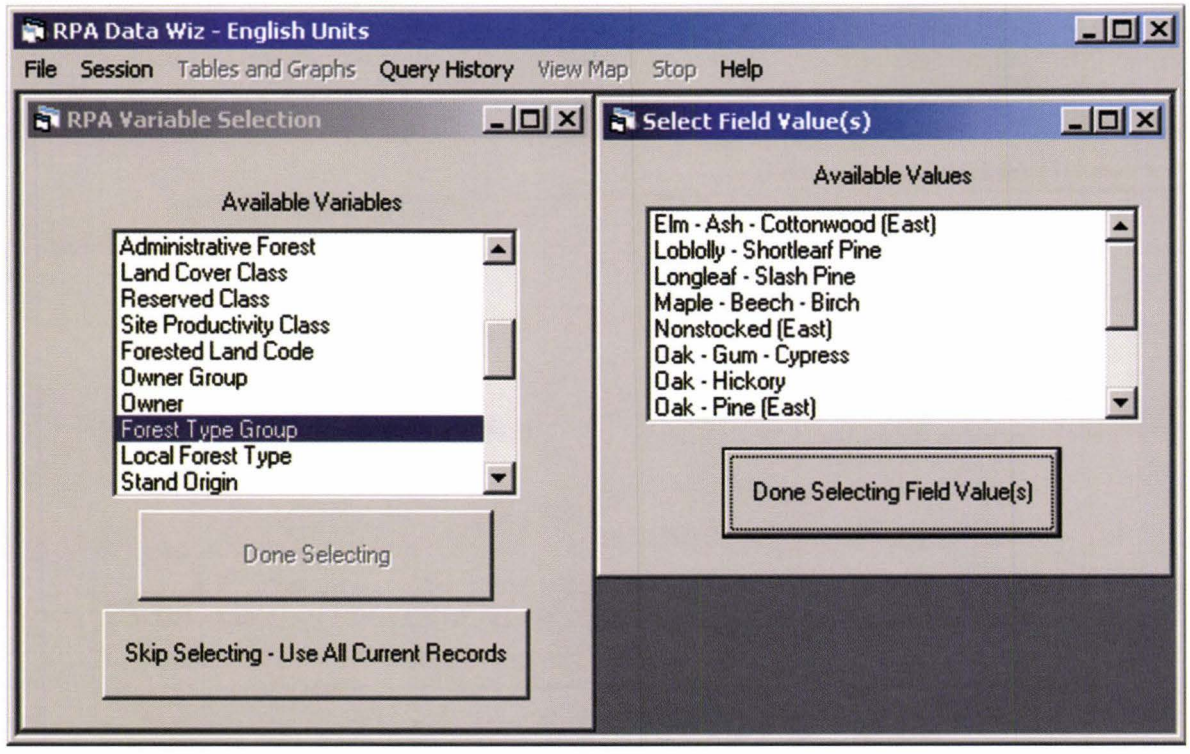


After creating a new session, you have to choose one or more RPA subregions. After making your choice, click **Done Selecting RPA Subregion(s)**.

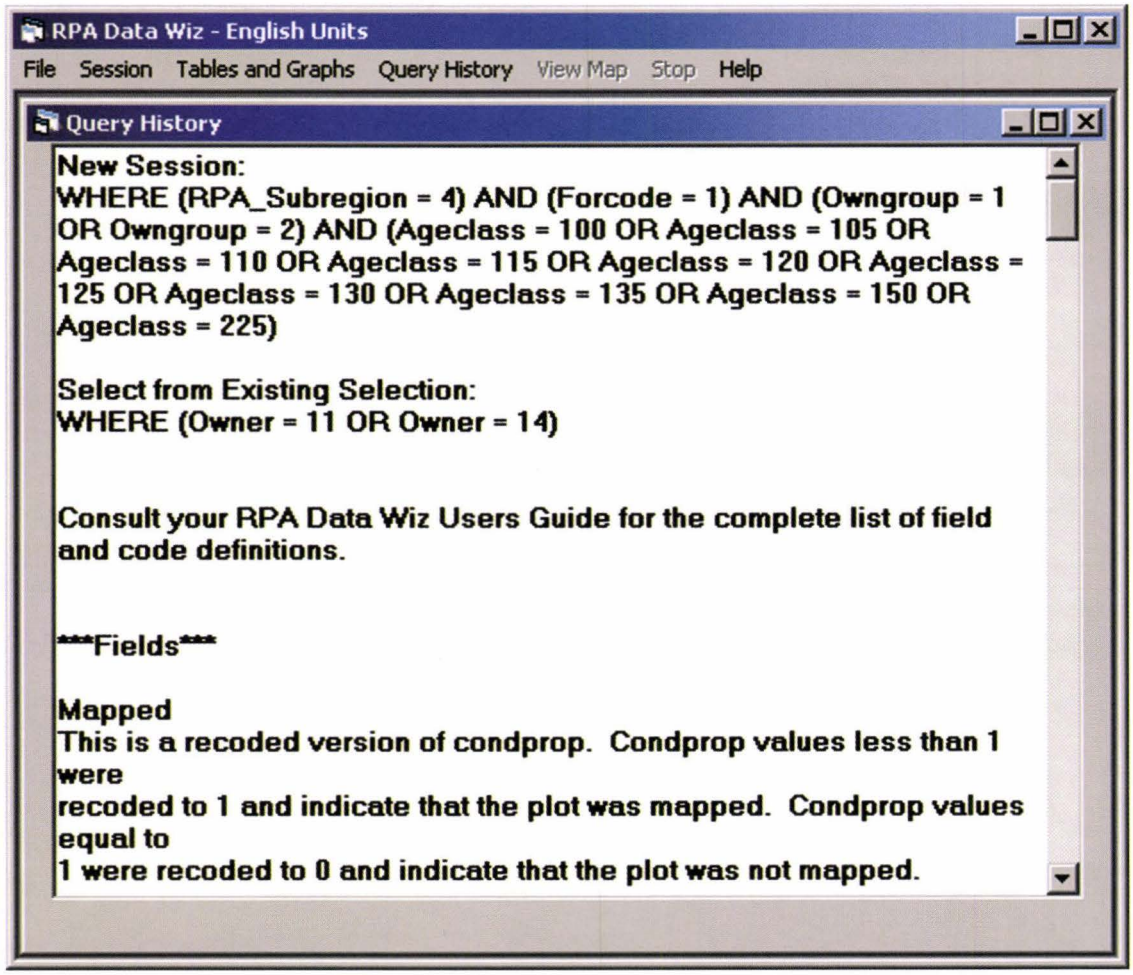


Next, the RPA Variable Selection dialog appears. Select a single variable. The Select Field Value(s) dialog appears with all the available values for the previously chosen variable. Choose any number of these values for the variable. Click **Done Selecting Field Value(s)**. Repeat this process as many times as necessary to reduce the selection of database records. Normally, you would include a selection here for some type of forest land (Forest Land as the value for Land Cover Class or a specific forest land type for Forested Land Code). Area is the only output variable associated with nonforest and water. Press **Done Selecting** to keep the selection criteria or choose **Skip Selecting – Use All Current Records** to use all the current records in future analyses.





If desired, choose **Query History** to show a simplified version of the selection code. Field names and codes appear as they are in the RPA Data Wiz database. Note that sometimes the length of the selection queries can become longer than is allowed. If this is the case, the query will fail and a new query will have to be chosen with fewer selection criteria. Some field value code definitions are listed in Query History; however, all of them are listed in appendix A.


RPA Data Wiz - English Units
File Session Tables and Graphs Query History View Map Stop Help
Query History
New Session:
WHERE (RPA_Subregion = 4) AND (Forcode = 1) AND (Owngroup = 1 OR Owngroup = 2) AND (Ageclass = 100 OR Ageclass = 105 OR Ageclass = 110 OR Ageclass = 115 OR Ageclass = 120 OR Ageclass = 125 OR Ageclass = 130 OR Ageclass = 135 OR Ageclass = 150 OR Ageclass = 225)
Select from Existing Selection:
WHERE (Owner = 11 OR Owner = 14)
Consult your RPA Data Wiz Users Guide for the complete list of field and code definitions.
Fields
Mapped
This is a recoded version of condprop. Condprop values less than 1 were
recoded to 1 and indicate that the plot was mapped. Condprop values equal to
1 were recoded to 0 and indicate that the plot was not mapped.

Select from Existing Selection

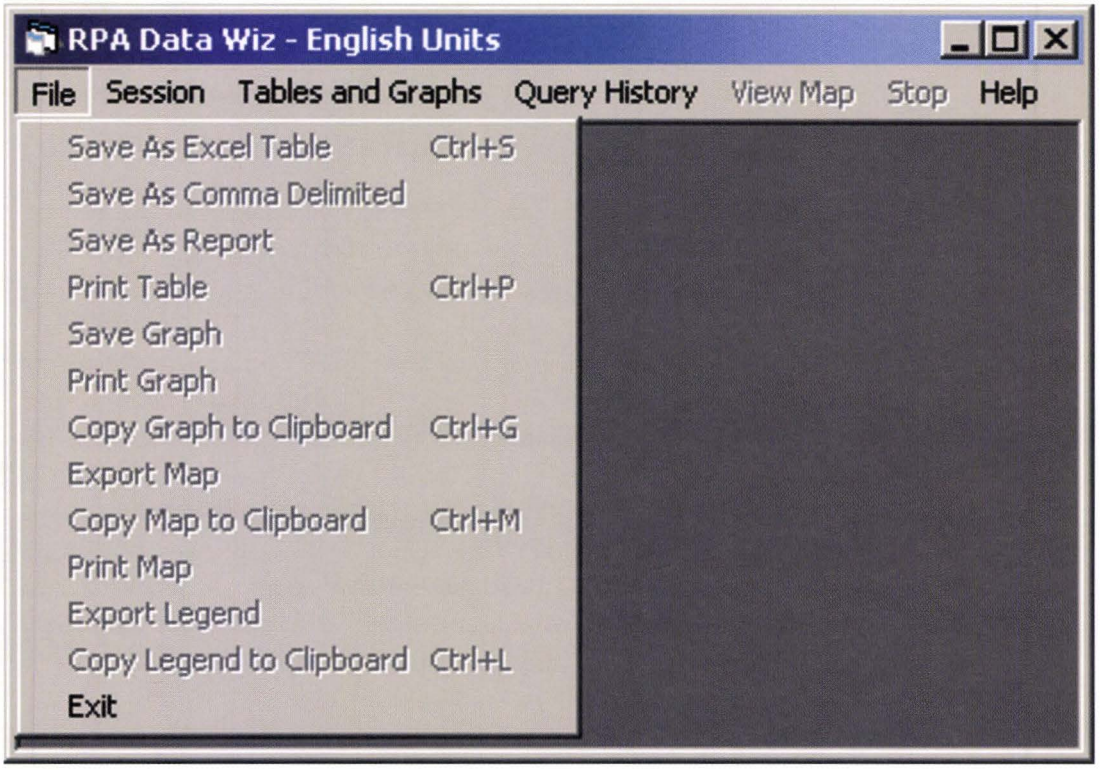
After you have completed creating a new session, you can go back and narrow that selection further. Using the existing records selected from New Session, click **Session \ Select from Existing Selection** to allow further reselection of records with the RPA Variable Selection and Select Field Value(s) dialogs as previously described. Any time Select from Existing Selection is enabled, you can use it to narrow your selection of records. Normally, some output (like tables or graphs) is created that results in more questions about the resource. Then you can further narrow the selection of records using the previous techniques to produce more output on the reselected records.

Add to Existing Selection

After you have narrowed a selection (applied New Session or Select from Existing Selection techniques), you can go back and add more records. Select **Session \ Add to Existing Selection**. All records (even those you already have selected) from the most recent selection of RPA subregions are available for addition to the latest selection of records. The information is made available for addition through the RPA Variable Selection and Select Field Value(s) dialogs using the steps previously described. Since all the information from the most recent selection of RPA subregions is provided for addition, some additions may not add any new records. To prevent duplicate information, RPA Data Wiz will not add records if they already exist in the latest selection. If necessary, choose **Query History** to review previous selection criteria.

Exiting RPA Data Wiz

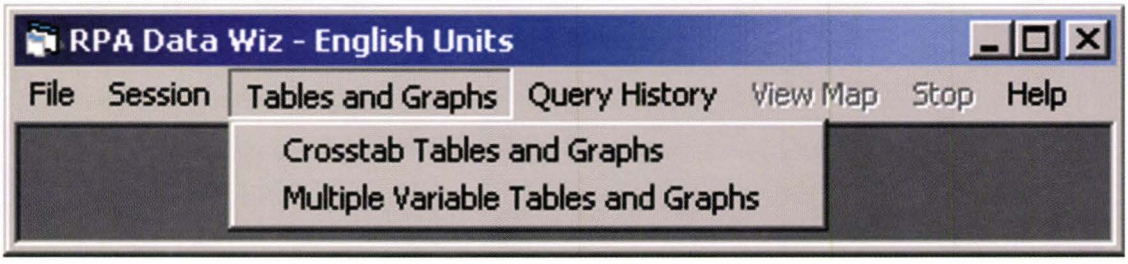
If Exit (under File) is enabled, then it is safe to shutdown RPA Data Wiz. When you are ready, select **File \ Exit** to quit RPA Data Wiz.



Chapter 4
Working with Tables and Graphs

All of the output tables in RPA Data Wiz are two-way tables made of rows, columns, and cells. You choose the variables that define the row and column headings and the variable(s) represented in the cells. The tables can report sums or ratios. As presented below, you can create two variations of the two-way table in RPA Data Wiz.

RPA Data Wiz produces two-dimensional bar graphs. Stacking bar graphs are produced when working with sums and nonstacking bar graphs are produced with ratios.



Crosstab Table and Graph Generator

Choose **Tables and Graphs \ Crosstab Tables and Graphs** to display the Crosstab Table and Graph Generator.

Creating a Table

In general a *crosstab* is a table of sums, averages, or some other calculation for a continuous variable grouped by two or more discrete variables. Each discrete variable can be composed of multiple divisions or classes. For example, forest type is composed of many classes, such as red pine and sugar maple.

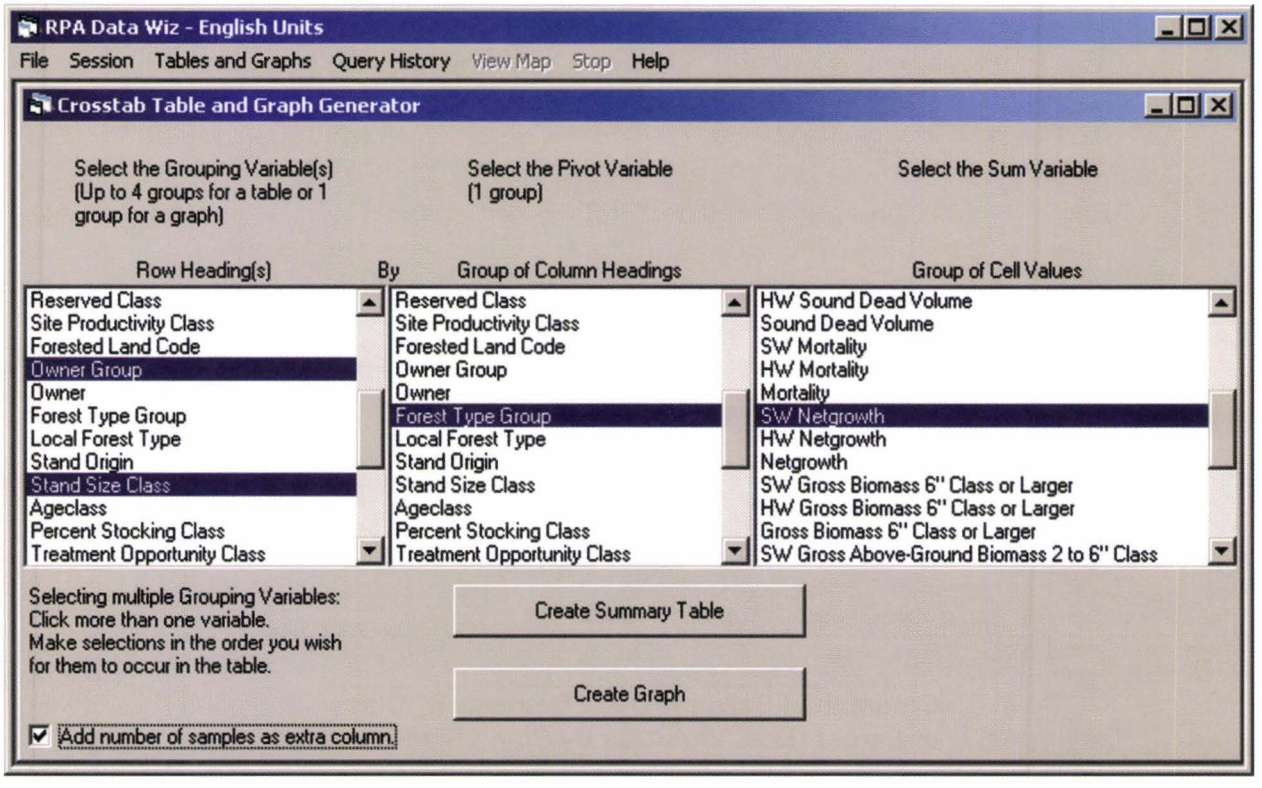
In RPA Data Wiz, the continuous variable is a sum, so it is called the *sum variable*. Only one sum variable can be selected. Sums are grouped by up to four variables on the left side of the table (*grouping variables* defining row headings) and one variable (*pivot variable* defining column headings) across the top of the table. This type of table is commonly created in spreadsheets.

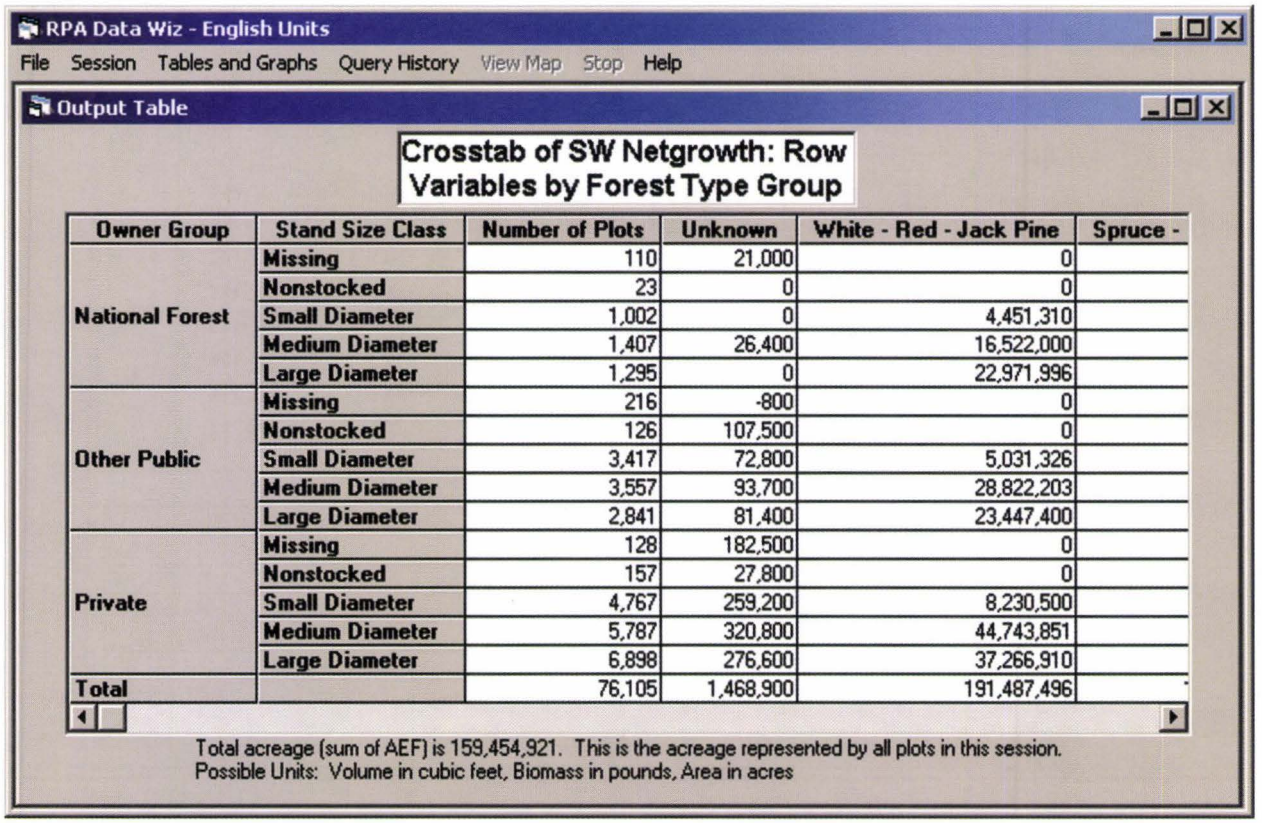
1. Choose one to four **grouping variables** in the Crosstab Table and Graph Generator. In this case, the CTRL and SHIFT keys do not add flexibility in selecting multiple variables. Just point and click the variables you wish to use as grouping variables. If you decide that you do not want a variable already selected, then click on the variable again. It will be deselected. The order in which you choose the grouping variables dictates the order in which they appear in the table. The example table below shows that Owner Group was chosen first, followed by Stand Size Class.
2. Choose one **pivot variable** to determine the column headings. In this case Forest Type Group was chosen as the pivot variable.
3. Choose the **sum variable** to occupy the cells of the table. SW Netgrowth was chosen in this example.
4. Click **Add number of samples as extra column** to include the number of RPA plots or records as an option. This is the sum of the samples associated with each row heading. This is meant to add a

measure of accuracy to the estimates displayed in the table. The numbers in the rows with thousands of associated RPA plots are more reliable than those in the rows with hundreds of associated plots.

5. Finally, click **Create Summary Table** to produce a table similar to the example below.

Rarely, the number of column headings exceeds the allowable limit and the table is not created. If this happens, switch the pivot variable with a grouping variable to achieve the same information in a different output format. This will work in most situations where there is only one grouping variable of interest.


RPA Data Wiz - English Units
File Session Tables and Graphs Query History View Map Stop Help
Crosstab Table and Graph Generator
Select the Grouping Variable(s) (Up to 4 groups for a table or 1 group for a graph)
Select the Pivot Variable (1 group)
Select the Sum Variable
Row Heading(s)
By
Group of Column Headings
Group of Cell Values
Reserved Class
Site Productivity Class
Forested Land Code
Owner Group
Owner
Forest Type Group
Local Forest Type
Stand Origin
Stand Size Class
Ageclass
Percent Stocking Class
Treatment Opportunity Class
HW Sound Dead Volume
Sound Dead Volume
SW Mortality
HW Mortality
Mortality
SW Netgrowth
HW Netgrowth
Netgrowth
SW Gross Biomass 6" Class or Larger
HW Gross Biomass 6" Class or Larger
Gross Biomass 6" Class or Larger
SW Gross Above-Ground Biomass 2 to 6" Class
Selecting multiple Grouping Variables:
Click more than one variable.
Make selections in the order you wish for them to occur in the table.
Create Summary Table
Create Graph
Add number of samples as extra column.


RPA Data Wiz - English Units
File Session Tables and Graphs Query History View Map Stop Help
Output Table
Crosstab of SW Netgrowth: Row Variables by Forest Type Group

Owner Group	Stand Size Class	Number of Plots	Unknown	White - Red - Jack Pine	Spruce -
National Forest	Missing	110	21,000	0	
	Nonstocked	23	0	0	
	Small Diameter	1,002	0	4,451,310	
	Medium Diameter	1,407	26,400	16,522,000	
	Large Diameter	1,295	0	22,971,996	
Other Public	Missing	216	-800	0	
	Nonstocked	126	107,500	0	
	Small Diameter	3,417	72,800	5,031,326	
	Medium Diameter	3,557	93,700	28,822,203	
	Large Diameter	2,841	81,400	23,447,400	
Private	Missing	128	182,500	0	
	Nonstocked	157	27,800	0	
	Small Diameter	4,767	259,200	8,230,500	
	Medium Diameter	5,787	320,800	44,743,851	
	Large Diameter	6,898	276,600	37,266,910	
Total		76,105	1,468,900	191,487,496	

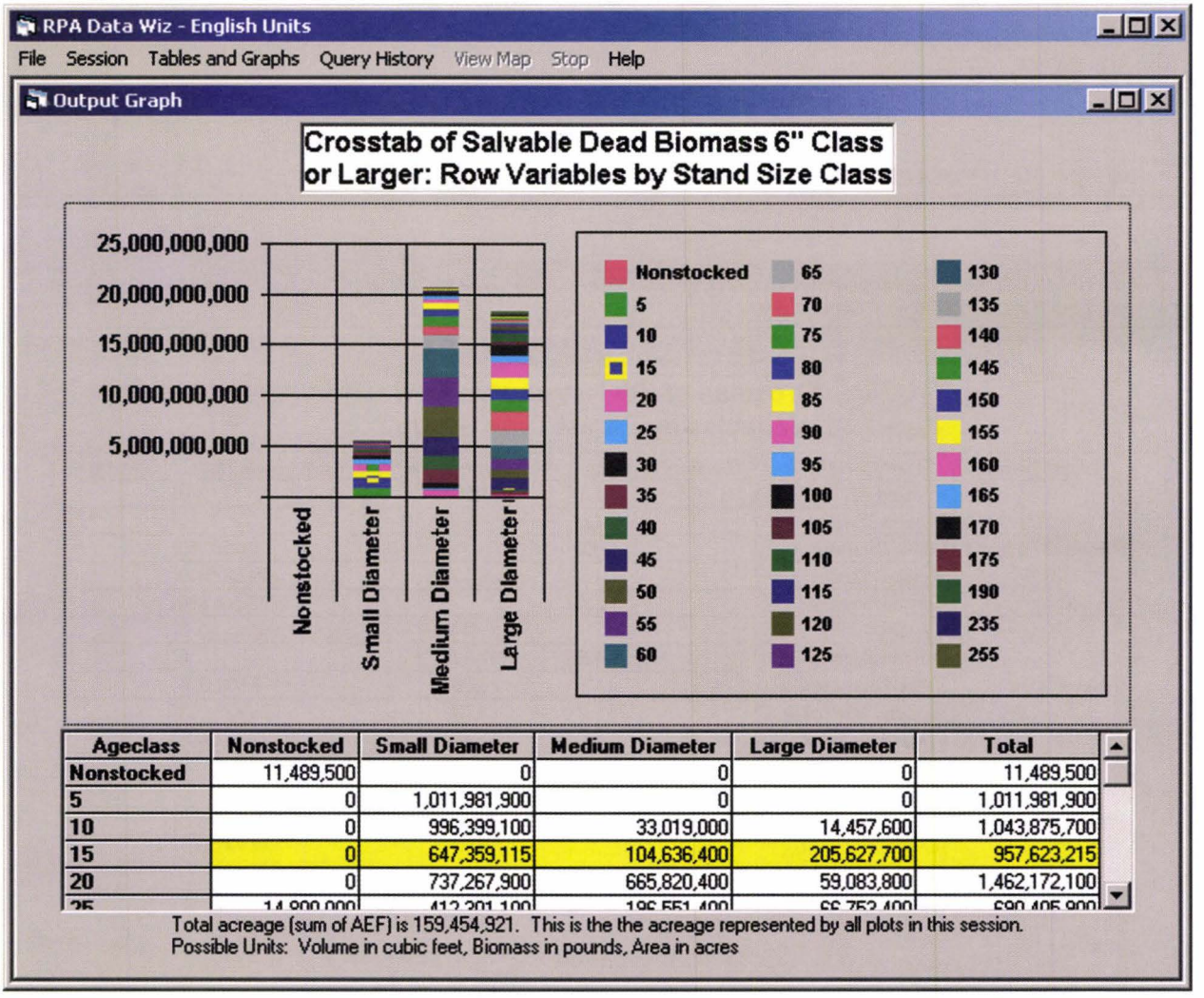
Total acreage (sum of AEF) is 159,454,921. This is the acreage represented by all plots in this session.
Possible Units: Volume in cubic feet, Biomass in pounds, Area in acres

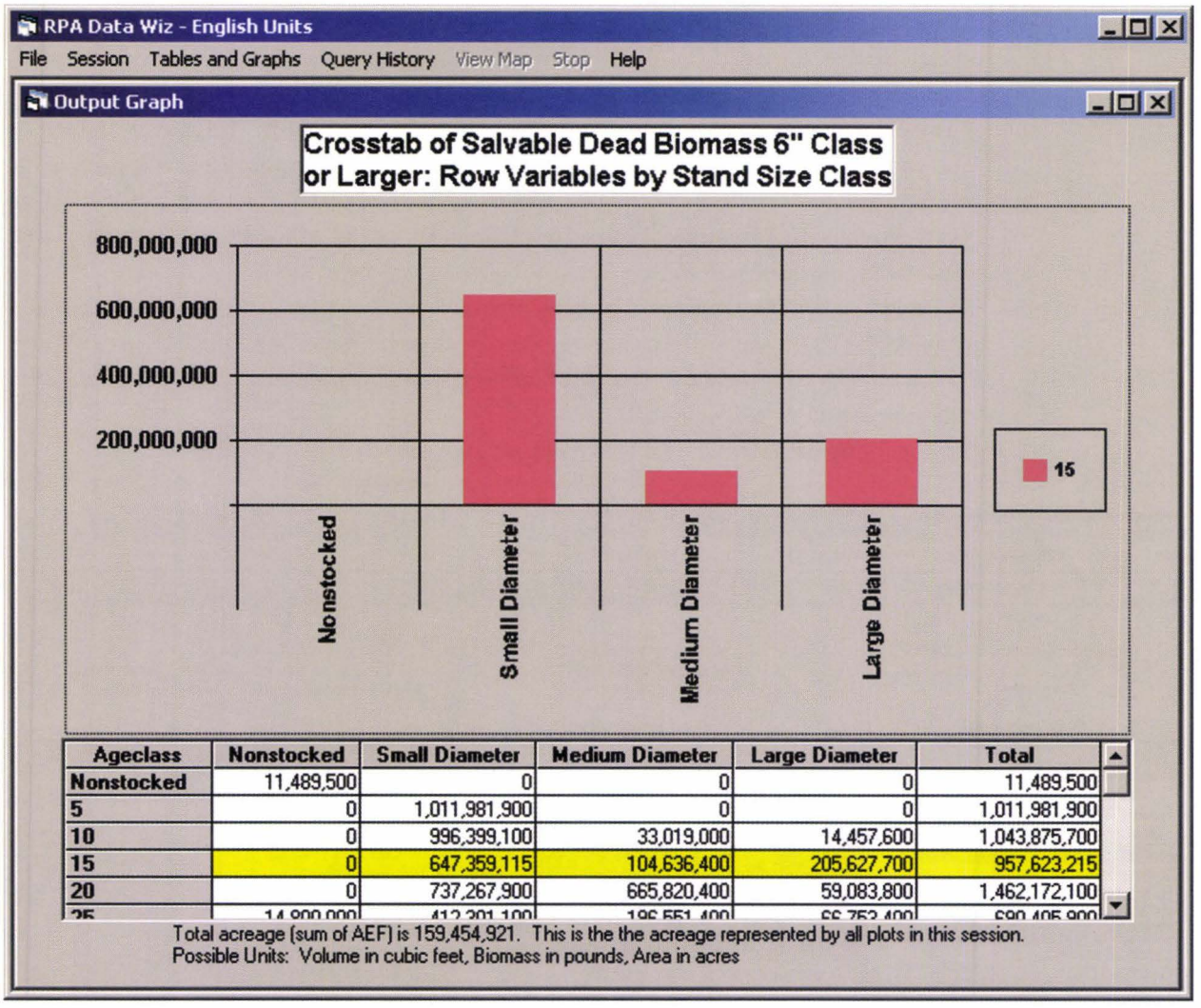
Creating a Graph

In the Crosstab Table and Graph Generator, choose variables of interest as you would when making a table (see "Creating a Table") except only choose one grouping variable. Click **Create Graph**. A two-dimensional stacking bar graph is created. The classes or divisions of the grouping variable are the series and the classes or divisions of the pivot variable are the bar categories.

The example below shows the classes of stand-size class as being the bar categories. The series comprise the divisions of age class. The example shows the 15-year age class as being selected. Select a series with a click of the mouse in the graph or in the legend, then the corresponding row in the table is also highlighted. This allows you to see the exact numbers associated with the selected series.

There is another way to clarify and depict the information associated with a single series. You can change the graph to show only a selected series. While holding the SHIFT key down, click on a series in the graph or legend. A new graph appears for the selected series. The second example below shows the graph for the 15-year age class series. The scale bar changes to provide more detail in many cases. Click outside the graph outline (outside the dotted line) to restore the display to the original graph with all the series. Clicking in the table does nothing. When a selected series is displayed in a new graph, the series is still highlighted on the graph and displays with annoying selection brackets. Click within the dotted line but off from the bars or legend to remove these selection brackets from the display.


RPA Data Wiz - English Units
File Session Tables and Graphs Query History View Map Stop Help
Output Graph
Crosstab of Salvable Dead Biomass 6" Class or Larger: Row Variables by Stand Size Class
25,000,000,000
20,000,000,000
15,000,000,000
10,000,000,000
5,000,000,000
Nonstocked
Small Diameter
Medium Diameter
Large Diameter
Nonstocked 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 125 130 135 140 145 150 155 160 165 170 175 190 235 255
Ageclass | Nonstocked | Small Diameter | Medium Diameter | Large Diameter | Total
Nonstocked | 11,489,500 | 0 | 0 | 0 | 11,489,500
5 | 0 | 1,011,981,900 | 0 | 0 | 1,011,981,900
10 | 0 | 996,399,100 | 33,019,000 | 14,457,600 | 1,043,875,700
15 | 0 | 647,359,115 | 104,636,400 | 205,627,700 | 957,623,215
20 | 0 | 737,267,900 | 665,820,400 | 59,083,800 | 1,462,172,100
Total acreage (sum of AEF) is 159,454,921. This is the the acreage represented by all plots in this session.
Possible Units: Volume in cubic feet, Biomass in pounds, Area in acres


RPA Data Wiz - English Units
File Session Tables and Graphs Query History View Map Stop Help
Output Graph
Crosstab of Salvable Dead Biomass 6" Class or Larger: Row Variables by Stand Size Class
800,000,000
600,000,000
400,000,000
200,000,000
Nonstocked
Small Diameter
Medium Diameter
Large Diameter
15
Ageclass | Nonstocked | Small Diameter | Medium Diameter | Large Diameter | Total
Nonstocked | 11,489,500 | 0 | 0 | 0 | 11,489,500
5 | 0 | 1,011,981,900 | 0 | 0 | 1,011,981,900
10 | 0 | 996,399,100 | 33,019,000 | 14,457,600 | 1,043,875,700
15 | 0 | 647,359,115 | 104,636,400 | 205,627,700 | 957,623,215
20 | 0 | 737,267,900 | 665,820,400 | 59,083,800 | 1,462,172,100
Total acreage (sum of AEF) is 159,454,921. This is the the acreage represented by all plots in this session.
Possible Units: Volume in cubic feet, Biomass in pounds, Area in acres

Multiple Variable Sums Table and Graph Generator

Choose **Tables and Graphs \ Multiple Variable Tables and Graphs** to display the Multiple Variable Sums Table and Graph Generator.

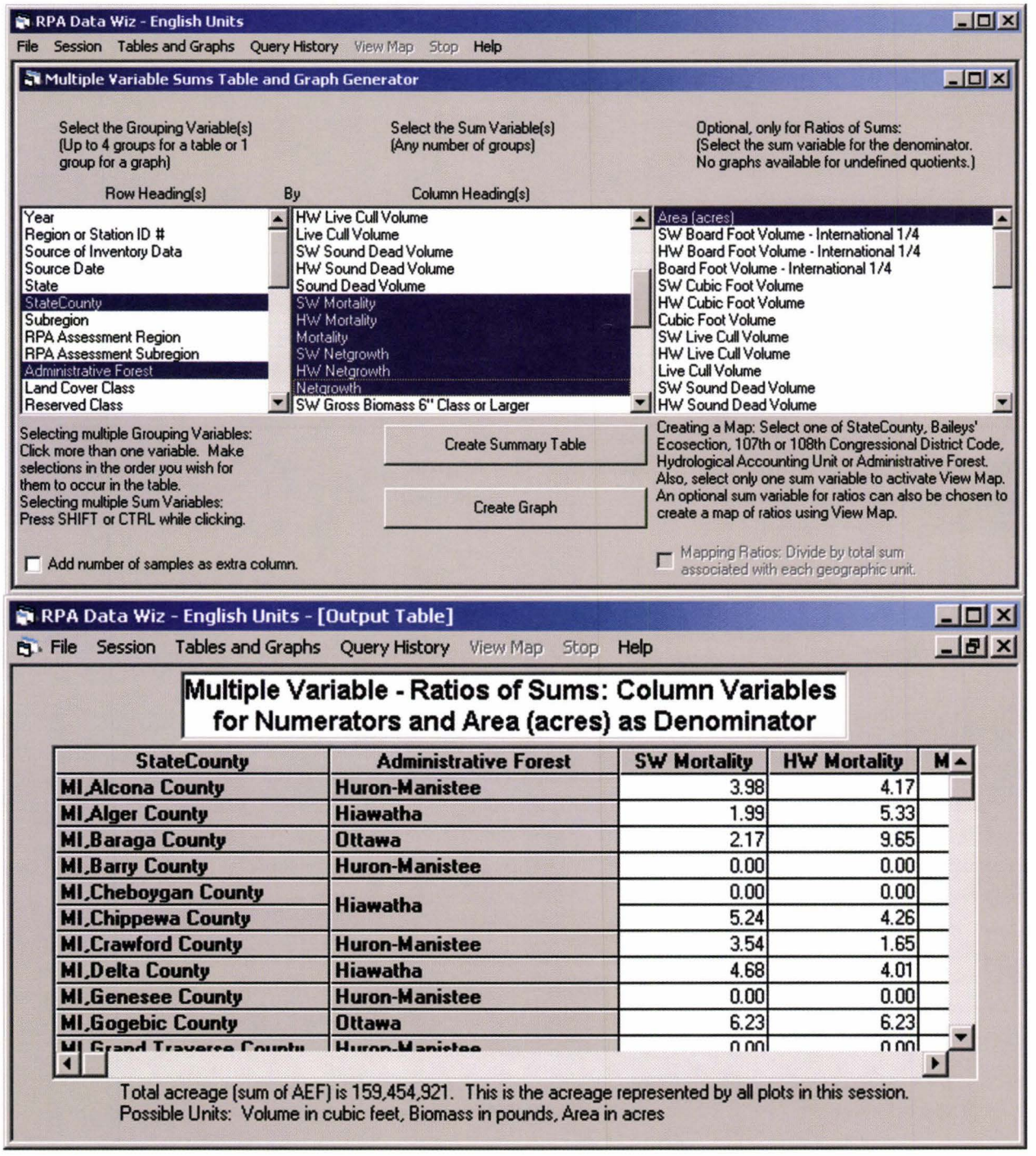
Creating a Table

Multiple variable sums table is a name created for tables in RPA Data Wiz that report sums for one or more continuous variables (*sum variables* defining column headings) indicated across the top of the table and grouped by up to four discrete variables (*grouping variables* defining row headings) on the left side of the table. The continuous variable(s) can be any number of sum variables listed.

If an optional continuous variable (only for ratios of sums) is chosen, then each sum variable total is divided by the sum of this optional variable for each unique grouping in the table. The result of this division, the quotient, will be identified as "undefined" if the sum of the optional variable (the denominator) equals zero. This is useful in a number of ways. Dividing by area results in per acre or per hectare estimates. Also, you can look at things like the ratio of mortality to netgrowth or the ratio of softwood to hardwood for the selected plots. Follow these steps.

1. Choose one to four **grouping variables** in the Multiple Variable Sums Table and Graph Generator. In this case, the CTRL and SHIFT keys do not add flexibility in selecting grouping variables but do work when selecting sum variables. Point and click the variables you wish to use as grouping variables. If you decide that you do not want a variable already selected, then click on the variable again. It will be deselected. The order in which you choose the grouping variables dictates the order in which they appear in the table. The example table below shows that StateCounty was chosen first, followed by Administrative Forest.

2. Choose one or more sum variables. The example below shows that the variables SW Mortality through Netgrowth were chosen. The order of column headings in the output table always follows the order in which sum variables are displayed in this dialog.
3. You may choose an optional ratio variable to divide the sum variable totals. This example shows that Area was chosen. The result is a table with mortality and netgrowth per acre. Remember that this is only for the records that were chosen in the session so these numbers may not represent all the plots in each StateCounty-Administrative forest combination. For example, the user may have only picked forest stands designated with the large stand-size class.
4. Click **Add number of samples as extra column** to include the number of RPA plots or records as an option. This is the sum of the samples associated with each row heading. For tables in this dialog, this column appears at the end or far right of the table. This is meant to add a measure of accuracy to the estimates displayed in the table.
5. Finally, click **Create Summary Table** to produce a table similar to the example below.


RPA Data Wiz - English Units
File Session Tables and Graphs Query History View Map Stop Help
Multiple Variable Sums Table and Graph Generator
Select the Grouping Variable(s) (Up to 4 groups for a table or 1 group for a graph)
Select the Sum Variable(s) (Any number of groups)
Optional, only for Ratios of Sums: (Select the sum variable for the denominator. No graphs available for undefined quotients.)
Row Heading(s)
By
Column Heading(s)
Year
Region or Station ID #
Source of Inventory Data
Source Date
State
StateCounty
Subregion
RPA Assessment Region
RPA Assessment Subregion
Administrative Forest
Land Cover Class
Reserved Class
HW Live Cull Volume
Live Cull Volume
SW Sound Dead Volume
HW Sound Dead Volume
Sound Dead Volume
SW Mortality
HW Mortality
Mortality
SW Netgrowth
HW Netgrowth
Netgrowth
SW Gross Biomass 6" Class or Larger
Area (acres)
SW Board Foot Volume - International 1/4
HW Board Foot Volume - International 1/4
Board Foot Volume - International 1/4
SW Cubic Foot Volume
HW Cubic Foot Volume
Cubic Foot Volume
SW Live Cull Volume
HW Live Cull Volume
Live Cull Volume
SW Sound Dead Volume
HW Sound Dead Volume
Selecting multiple Grouping Variables: Click more than one variable. Make selections in the order you wish for them to occur in the table.
Selecting multiple Sum Variables: Press SHIFT or CTRL while clicking.
Create Summary Table
Create Graph
Creating a Map: Select one of StateCounty, Baileys' Ecosection, 107th or 108th Congressional District Code, Hydrological Accounting Unit or Administrative Forest. Also, select only one sum variable to activate View Map. An optional sum variable for ratios can also be chosen to create a map of ratios using View Map.
Add number of samples as extra column.
Mapping Ratios: Divide by total sum associated with each geographic unit.
RPA Data Wiz - English Units - [Output Table]
File Session Tables and Graphs Query History View Map Stop Help
Multiple Variable - Ratios of Sums: Column Variables for Numerators and Area (acres) as Denominator
StateCounty
Administrative Forest
SW Mortality
HW Mortality
MI,Alcona County
Huron-Manistee
3.98
4.17
MI,Alger County
Hiawatha
1.99
5.33
MI,Baraga County
Ottawa
2.17
9.65
MI,Barry County
Huron-Manistee
0.00
0.00
MI,Cheboygan County
Hiawatha
0.00
0.00
MI,Chippewa County
5.24
4.26
MI,Crawford County
Huron-Manistee
3.54
1.65
MI,Delta County
Hiawatha
4.68
4.01
MI,Genesee County
Huron-Manistee
0.00
0.00
MI,Gogebic County
Ottawa
6.23
6.23
Total acreage (sum of AEF) is 159,454,921. This is the acreage represented by all plots in this session.
Possible Units: Volume in cubic feet, Biomass in pounds, Area in acres

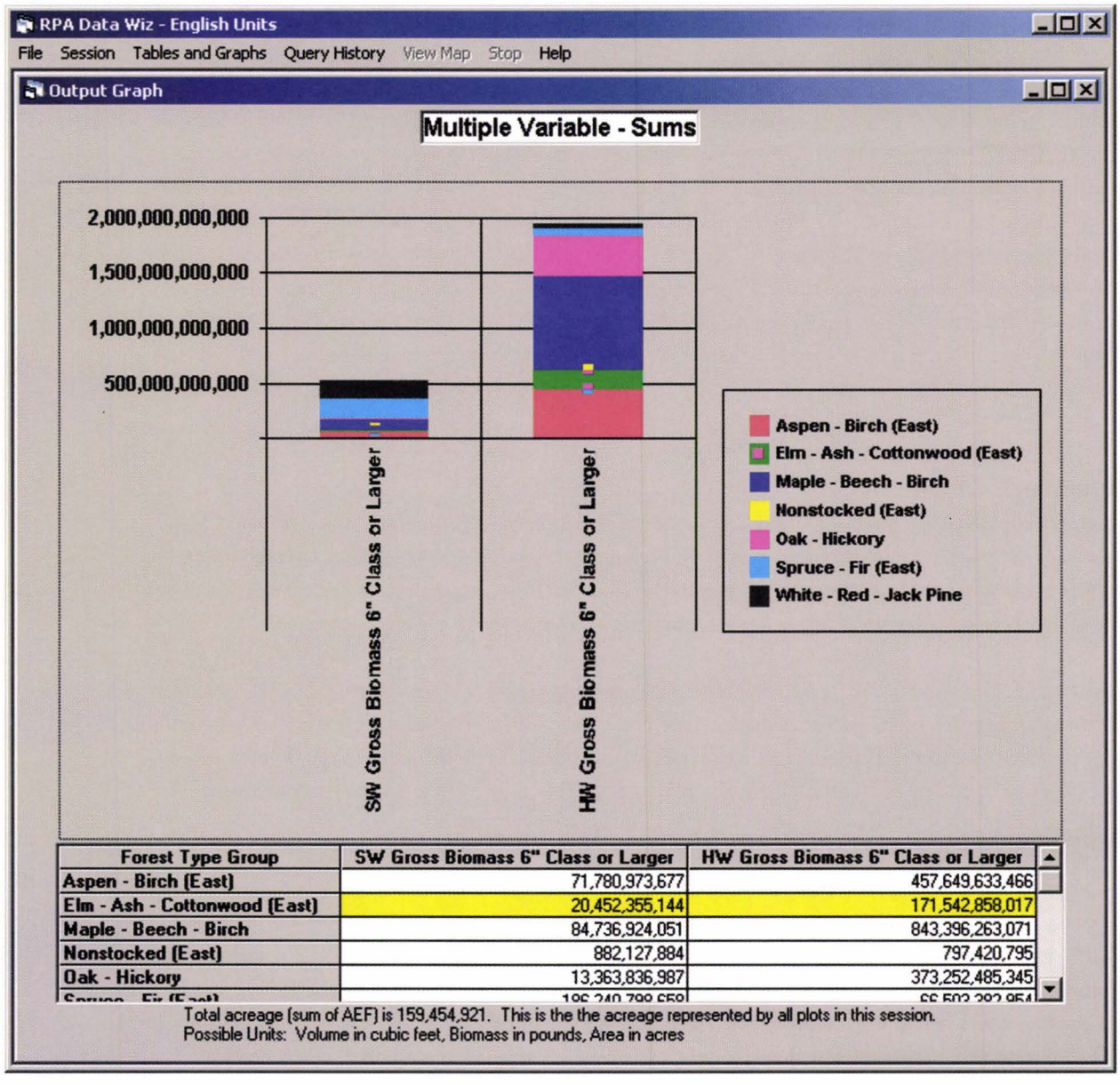
A second optional ratio can be produced when working with grouping variables associated with maps in RPA Data Wiz. The Mapping Ratios checkbox is available when one mapping, grouping variable (StateCounty, Baileys' Ecosection, 107th or 108th Congressional District Code, Hydrological Accounting Unit, or Administrative Forest); one sum variable; and one variable in Optional, only for Ratios of Sums are chosen. If this checkbox is chosen, then a ratio of the sum variable total to the optional variable total in each geographic unit populates the table. The key is that the optional variable total is the total for all plots in the geographic unit, even when the records involved with the sum variable totals may only involve a subset of the plots in the geographic unit. For instance, the user may have only picked forest stands designated with the large stand-size class but the optional variable total will involve all plots regardless of stand size. The results would represent the ratio of large stand-size class plots to all stand-size class plots. Another common output from using this technique would be to produce the ratio of timberland to all land for each county.

Creating a Graph

In the Multiple Variable Sums Table and Graph Generator, choose variables of interest as you would when making a table (see "Creating a Table"), except only choose one grouping variable. Click **Create Graph**. If no optional ratio variable is chosen then a two-dimensional stacking bar graph is created. The classes or divisions of the grouping variable are the series, and the sum variables are the bar categories.

The example below shows SW Gross Biomass 6" Class or Larger and HW Gross Biomass 6" Class or Larger as being the bar categories. The series make up the Forest Type Group. The example shows the Elm-Ash-Cottonwood (East) series as selected. Select a series with a click of the mouse in the graph or in the legend, then the corresponding row in the table is also highlighted. This allows you to see the exact numbers associated with the selected series.

As with graphs associated with crosstabs, there is another way to clarify and depict the information associated with a single series. You can change the graph to show only a selected series. While holding the SHIFT key down, click on a series in the graph or legend. A new graph appears for the selected series. The second example below shows the graph for the Elm-Ash-Cottonwood (East) series. The scale bar changes to provide more detail in many cases. Click outside the graph outline (outside the dotted line) to restore the display to the original graph with all the series. Clicking in the table does nothing. When a selected series is displayed in a new graph, the series is still highlighted on the graph and displays with annoying selection brackets. Click within the dotted line but off from the bars or legend to remove these selection brackets from the display.


RPA Data Wiz - English Units
File Session Tables and Graphs Query History View Map Stop Help
Output Graph
Multiple Variable - Sums
2,000,000,000,000
1,500,000,000,000
1,000,000,000,000
500,000,000,000
SW Gross Biomass 6" Class or Larger
HW Gross Biomass 6" Class or Larger
Aspen - Birch (East)
Elm - Ash - Cottonwood (East)
Maple - Beech - Birch
Nonstocked (East)
Oak - Hickory
Spruce - Fir (East)
White - Red - Jack Pine

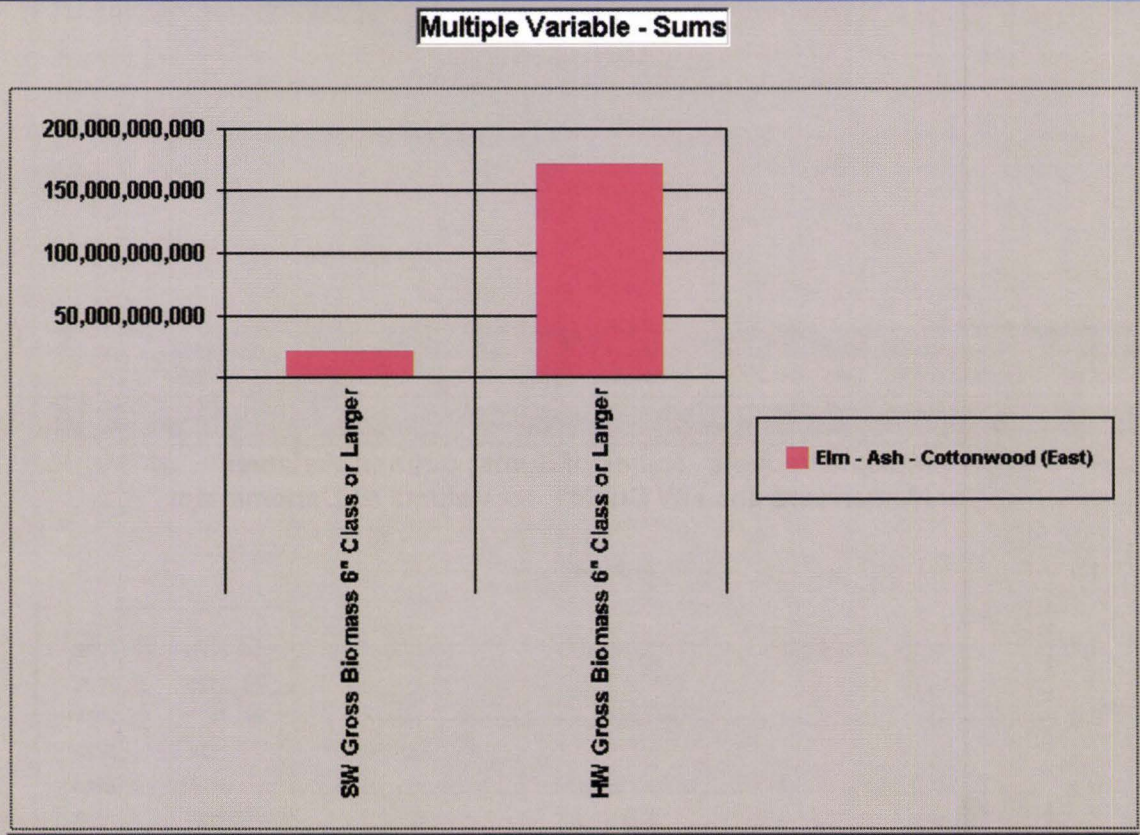
Forest Type Group	SW Gross Biomass 6" Class or Larger	HW Gross Biomass 6" Class or Larger
Aspen - Birch (East)	71,780,973,677	457,649,633,466
Elm - Ash - Cottonwood (East)	20,452,355,144	171,542,858,017
Maple - Beech - Birch	84,736,924,051	843,396,263,071
Nonstocked (East)	882,127,884	797,420,795
Oak - Hickory	13,363,836,987	373,252,485,345

Total acreage (sum of AEF) is 159,454,921. This is the the acreage represented by all plots in this session.
Possible Units: Volume in cubic feet, Biomass in pounds, Area in acres

RPA Data Wiz - English Units

File Session Tables and Graphs Query History View Map Stop Help

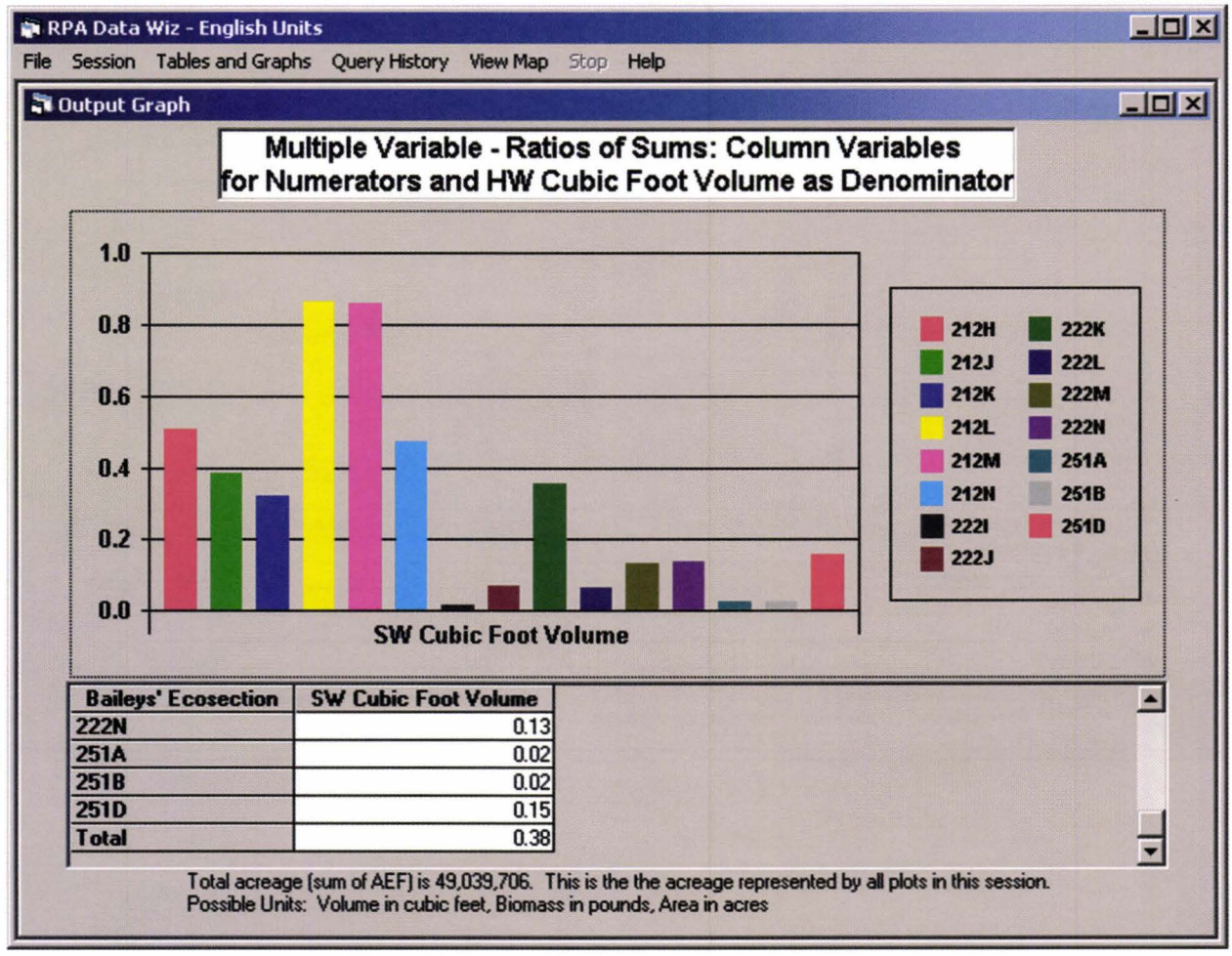
Output Graph



Forest Type Group	SW Gross Biomass 6" Class or Larger	HW Gross Biomass 6" Class or Larger
Aspen - Birch (East)	71,780,973,677	457,649,633,466
Elm - Ash - Cottonwood (East)	20,452,355,144	171,542,858,017
Maple - Beech - Birch	84,736,924,051	843,396,263,071
Nonstocked (East)	882,127,884	797,420,795
Oak - Hickory	13,363,836,987	373,252,485,345
Spruce - Fir (East)	196,240,799,659	66,502,292,954

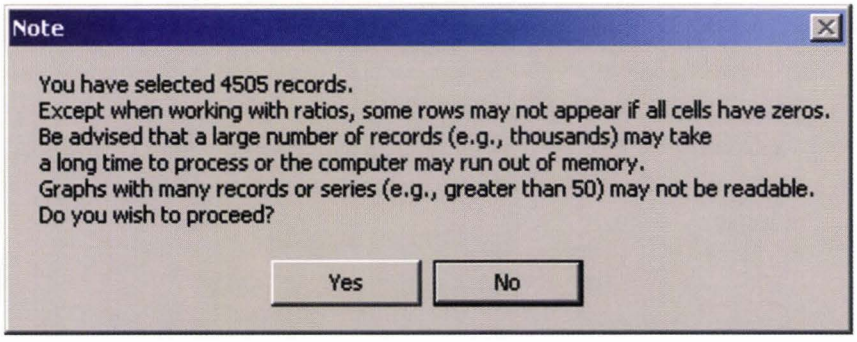
Total acreage (sum of AEF) is 159,454,921. This is the the acreage represented by all plots in this session.
Possible Units: Volume in cubic feet, Biomass in pounds, Area in acres

There is a difference in the type of graph displayed if an optional ratio variable is chosen in the Multiple Variable Sums Table and Graph Generator. Instead of a stacking bar graph, a nonstacking bar graph is created (see example below). In a stacking bar graph, the top of the bar represents the total sum for the bar category. This is useful when showing sums; on the other hand, it makes no sense to show ratios as stacking when the total sum of the ratios for a bar category does not represent the overall ratio. Notice in the example below that the overall ratio of SW Cubic Foot Volume to HW Cubic Foot Volume is 0.38 (Total row of the associated table). As explained in the first section of "Creating a Graph," you can highlight individual series and display graphs of individual series.

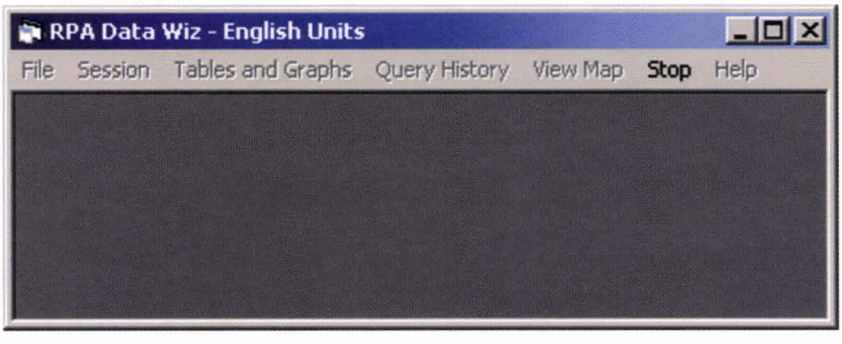


Warning Message

If a resulting crosstab or multiple variable table is large, you may see a warning like the one below. What you do next depends on the speed and memory of your computer. On a 1.8 GHz machine with 1 GB of memory (a fast computer), the operation below (4,556 records) took 8 minutes.


Note
You have selected 4505 records.
Except when working with ratios, some rows may not appear if all cells have zeros.
Be advised that a large number of records (e.g., thousands) may take
a long time to process or the computer may run out of memory.
Graphs with many records or series (e.g., greater than 50) may not be readable.
Do you wish to proceed?
Yes
No

We recommend trying to create some of the bigger tables and pressing the **Stop** button on the main menu if the operation takes too long. After awhile you will gain a sense of how long it takes to create various size tables on your computer. Keep in mind that given the same number of rows in a table, it takes longer when more grouping variables are involved.



Problem: Record Headings Filling the Screen?

Sometimes when working with small computer screens and multiple grouping variables (define row headings), the row headings fill the screen and the rest of the table cells appear to be unavailable. First, make sure your form sizes are maximized (click on the box in the upper right-hand corner of each form to maximize the size). If there is still a problem, you will need to narrow the column width for some of the row headings. Place the cursor on the division line between column headings. Next, click and drag with the mouse to decrease column width. This should allow you to scroll through the rest of the table.

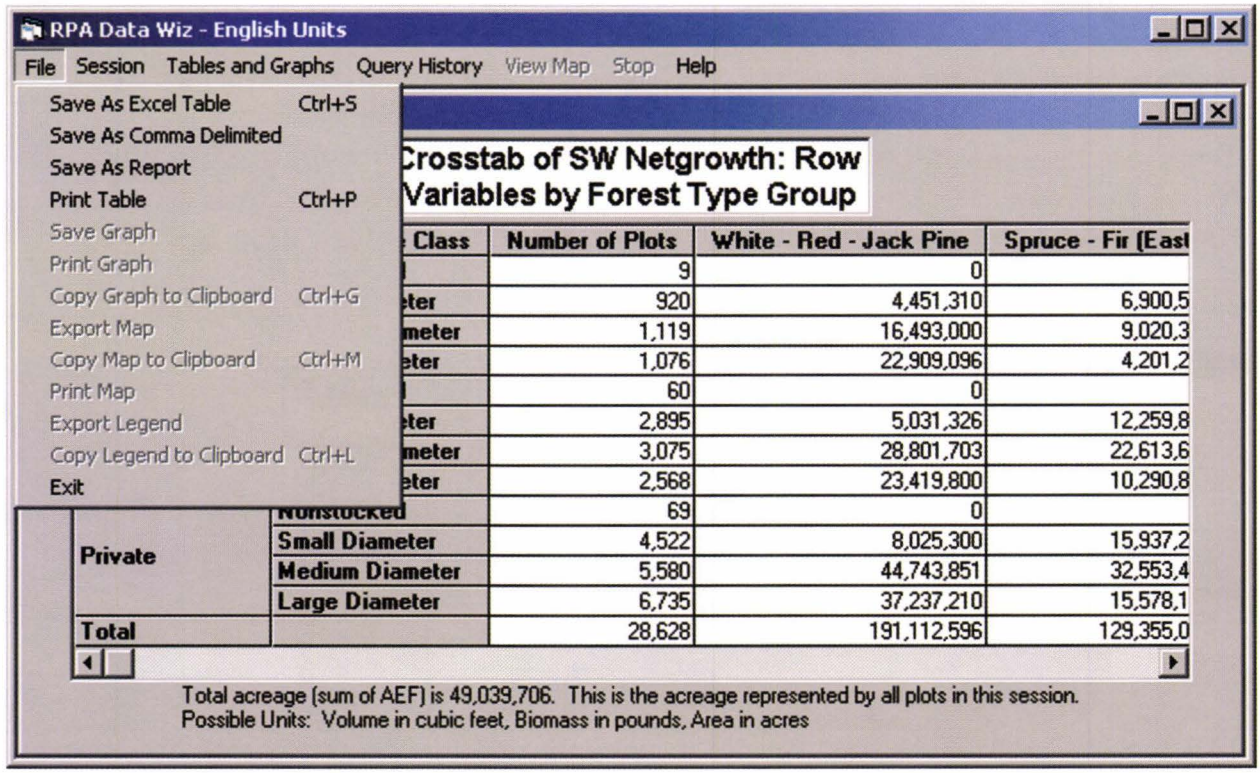
File Menu and Table Output Options

There are many options for table output from the File menu in RPA Data Wiz. A Save / Print dialog will appear for each of the formats and you can choose where to save the file. The default is in the temporary directory, temp, of the RPA Data Wiz application directory.

If you have Microsoft Excel installed on your computer, then you can save the table in Excel format. Choose **Save As Excel Table** or press **CTRL + S** to save the table in your version of Excel. This option will not work if you do not have Excel or if your Excel version is older than Excel 95. The column and row headings are automatically fixed and appear in bold font when opened in Excel.

The next two output formats are text. Pick **Save As Comma Delimited** to save the output with table headings and values separated with commas ("csv" file extension). This format can be imported into many software applications. Choose **Save As Report** to save the table in a report format ("txt" file extension).

Finally, select **Print Table** or press **CTRL + P** to print the table to a printer using the Print dialog. The recommendation is to choose landscape for the orientation (the default). Note that you can also save output tables associated with graphs.



File Menu and Graph Output Options

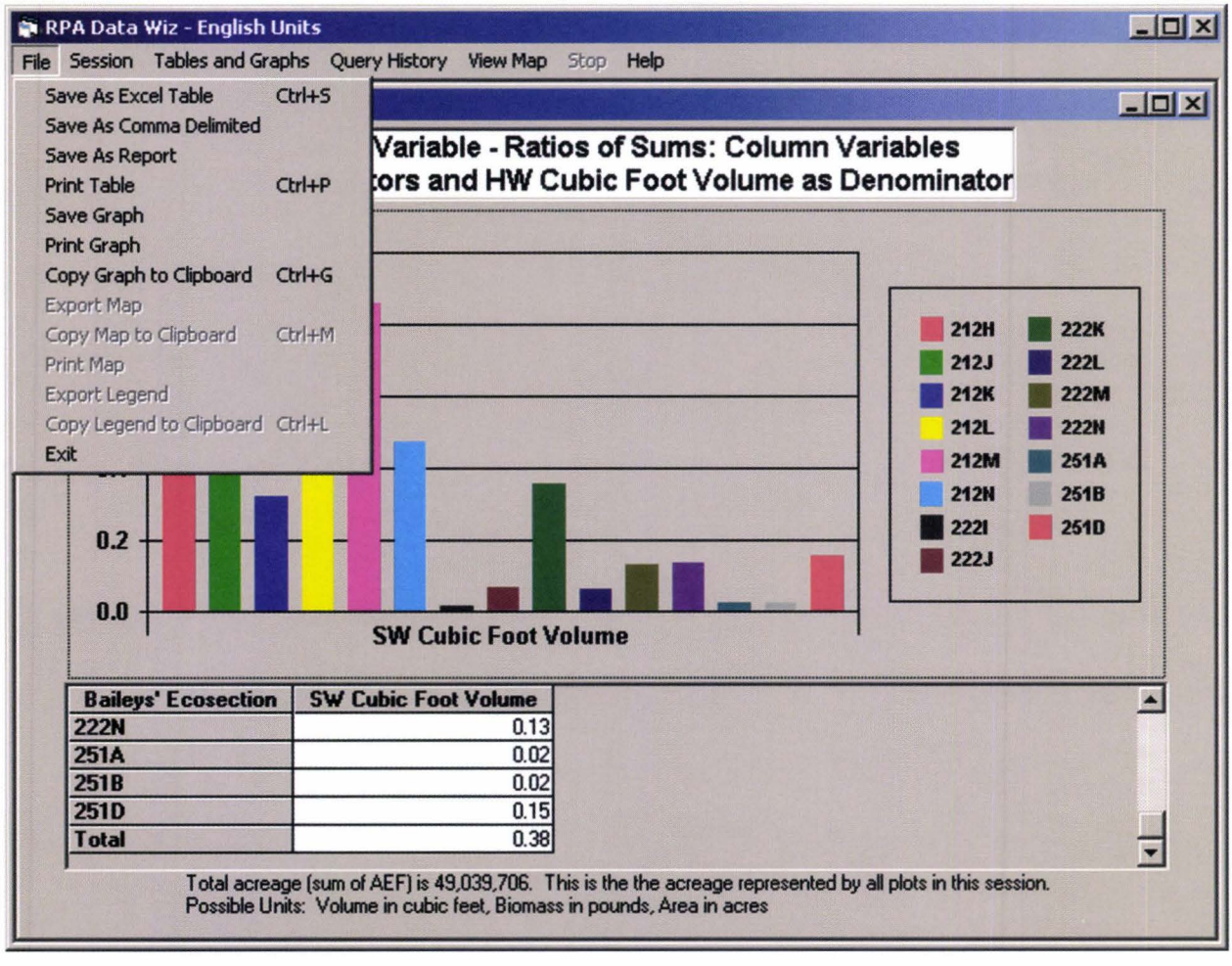
Like the table output options, there are several options for graph output from the File menu in RPA Data Wiz. A graph heading does not output with the graph image. This allows you the freedom to make your own title in a final product using another software package like Microsoft PowerPoint. You can easily import or copy and paste the graph into another software package.

Choose **Save Graph** to save the graph in bitmap format. The Save / Print dialog displays and allows you to save the file in a location of your choice. The default is in the temporary directory, temp, of the RPA Data Wiz application directory. You can now import the graph into another software package. If you are working in PowerPoint, select **Insert \ Picture \ From File** and then choose the file.

Choose **Copy Graph to Clipboard** or press **CTRL + G** to copy the graph as a Windows metafile to the Windows clipboard. The data in the graph is also pasted into memory. The clipboard holds copied objects in memory and not as files. Consequently, you are not asked to save to a file. Depending upon where and how you perform a paste, the data or the image of the graph is pasted. If you are working in Excel, then select **Edit \ Paste** to paste the number data in the spreadsheet. Note that the row heading may not paste with the rest of the data. This appears to be a Microsoft bug in the software. To paste an image of the graph into the spreadsheet, choose **Edit \ Paste Special...** and select the **Bitmap** type. If you are working in Microsoft PowerPoint, then the image of the graph will paste into the document. We recommend that you choose **Edit \ Paste Special...** and select **Device Independent Bitmap**; otherwise, the graph may not paste correctly. You may try pasting in a number of different formats to see what works best for you. Usually, the bitmap option works well for this situation.

Whether you are opening the image from a saved bitmap or pasting from the clipboard, you may need to resize the graph to fit your area of interest. This is usually done by selecting the pasted bitmap image and then changing the size properties of the image or by clicking on a corner of the image and dragging it. In PowerPoint, select **Format \ Picture \ Size** and change the size.

Finally, choose **Print Table** to print the table using the Print dialog. We recommend choosing landscape for the orientation (the default). Note that you can also save output tables associated with graphs (see "File Menu and Table Output Options").



Working with Multiple Output Tables in a Spreadsheet

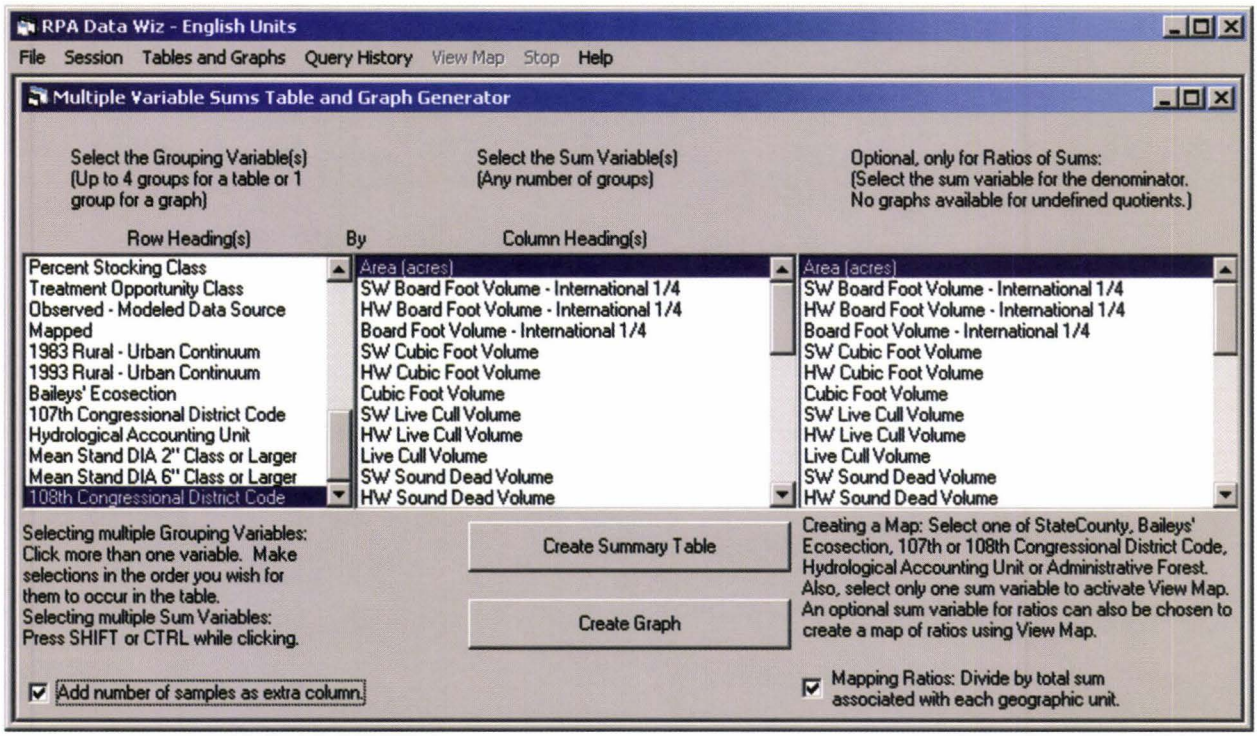
Except when working with ratios, any row containing all zeros will not appear. Likewise, these rows are not part of the output from RPA Data Wiz. Some large tables result in thousands of rows and many total to 0. By not displaying or including these rows in output, computer resources are saved and tables are easier to read. This is important to remember. The disadvantage is that it can cause problems when working with multiple output tables in one spreadsheet. You may try working with multiple output tables in one Excel sheet and expect the rows from the tables to match up. Holding everything else constant, output tables with ratios may have more rows than output tables that report sums. In future versions of RPA Data Wiz, the option to include rows that total to 0 in any table will probably be added.

Chapter 5
Working with Maps

Preparing to View Map

Before creating a map, you must first create a table or graph in the Multiple Variable Sums Table and Graph Generator (see Chapter 4). Here are the extra requirements for making a map. While creating the table or graph, select only one mapping, grouping variable and only one sum variable. Any of the other options in the dialog may also be chosen. The mapping, grouping variables are StateCounty, Baileys' Ecosection, 107th or 108th Congressional District Code, Hydrological Accounting Unit, and Administrative Forest.

Make a table using the Multiple Variable Sums Table and Graph Generator and the restrictions mentioned. Afterwards, select **View Map** and the appropriate map choice is enabled. The example below shows the 108th Congressional District Code as the grouping variable of choice. Consequently, a 108th Congressional District map will be developed. Area is the choice for the sum variable and the optional ratio variable. Both optional boxes are checked. The number of samples associated with each congressional district will be displayed in the table. Including the number of samples in the table never affects the map. The optional Mapping Ratios checkbox will result in a different kind of ratio (see "Multiple Variable Sums Table and Graph Generator" in Chapter 4). During the creation of the initial session (see Chapter 3), timberland only occurring on public land was chosen for MI, WI, and MN. In this case, checking the Mapping Ratios checkbox will result in a ratio of public timberland to all land for each congressional district. Consequently, the result will be a 108th Congressional District map of public timberland to all land. The congressional district code is defined in appendix A.


RPA Data Wiz - English Units
File Session Tables and Graphs Query History View Map Stop Help
Multiple Variable Sums Table and Graph Generator
Select the Grouping Variable(s)
(Up to 4 groups for a table or 1 group for a graph)
Select the Sum Variable(s)
(Any number of groups)
Optional, only for Ratios of Sums:
(Select the sum variable for the denominator.
No graphs available for undefined quotients.)
Row Heading(s)
By
Column Heading(s)
Percent Stocking Class
Treatment Opportunity Class
Observed - Modeled Data Source
Mapped
1983 Rural - Urban Continuum
1993 Rural - Urban Continuum
Baileys' Ecosection
107th Congressional District Code
Hydrological Accounting Unit
Mean Stand DIA 2" Class or Larger
Mean Stand DIA 6" Class or Larger
108th Congressional District Code
Area (acres)
SW Board Foot Volume - International 1/4
HW Board Foot Volume - International 1/4
Board Foot Volume - International 1/4
SW Cubic Foot Volume
HW Cubic Foot Volume
Cubic Foot Volume
SW Live Cull Volume
HW Live Cull Volume
Live Cull Volume
SW Sound Dead Volume
HW Sound Dead Volume
Area (acres)
SW Board Foot Volume - International 1/4
HW Board Foot Volume - International 1/4
Board Foot Volume - International 1/4
SW Cubic Foot Volume
HW Cubic Foot Volume
Cubic Foot Volume
SW Live Cull Volume
HW Live Cull Volume
Live Cull Volume
SW Sound Dead Volume
HW Sound Dead Volume
Selecting multiple Grouping Variables:
Click more than one variable. Make selections in the order you wish for them to occur in the table.
Selecting multiple Sum Variables:
Press SHIFT or CTRL while clicking.
Create Summary Table
Create Graph
Creating a Map: Select one of StateCounty, Baileys' Ecosection, 107th or 108th Congressional District Code, Hydrological Accounting Unit or Administrative Forest. Also, select only one sum variable to activate View Map. An optional sum variable for ratios can also be chosen to create a map of ratios using View Map.
Add number of samples as extra column.
Mapping Ratios: Divide by total sum associated with each geographic unit.

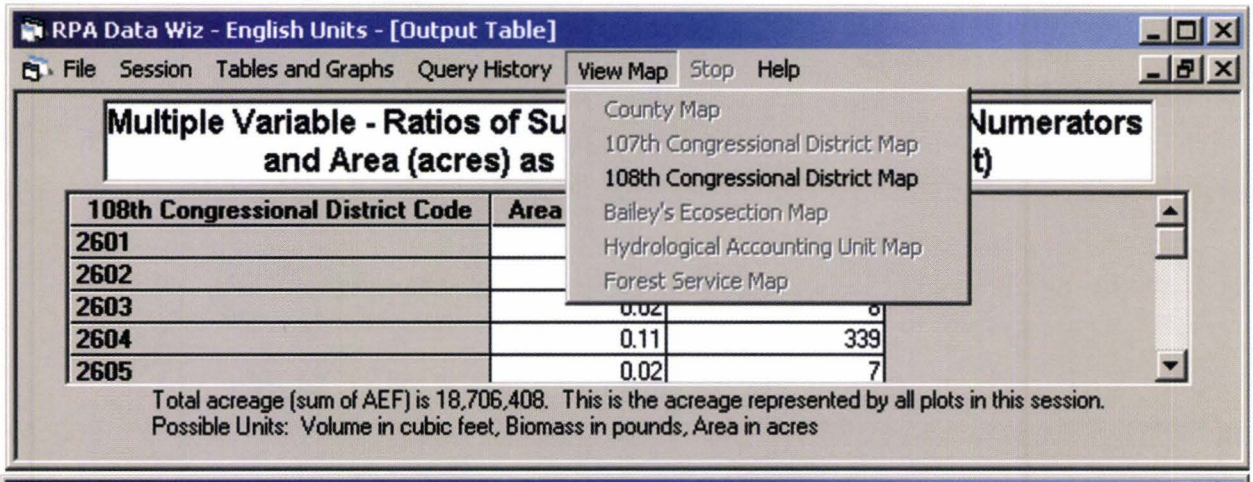
View Map

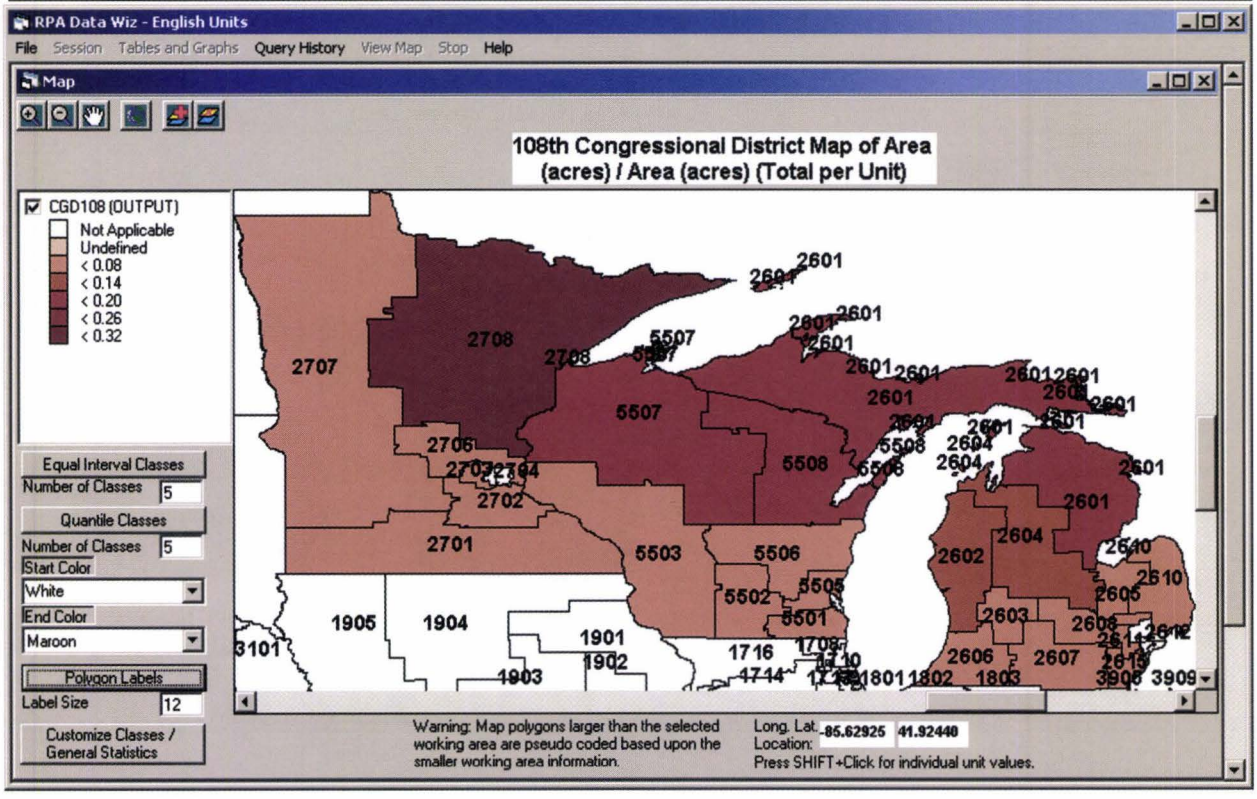
All maps in RPA Data Wiz are *classification* or *choropleth* maps, which group the values of the sum variable or ratios into discrete ranges and represent each range with a different color. Follow the steps below to create several different types of choropleth maps.

Equal Interval Map

1. Select **View Map** and the enabled map. The Map form appears. The map view is automatically zoomed in on the polygons involved. The area of the map displayed is called the *map extent*.
2. Choose ***Equal Interval Classes*** to display a map where the classes have an equal range of values.
3. Change the number of classes by typing in a different number for **Number of Classes**.
4. *Ramp* the colors; in other words, change the colors of the classes using a graduated scheme by selecting the **Start Color** and **End Color**.
5. Choose **Polygon Labels** to display the names of the geographic units.
6. Change the size (points) of the polygon labels by adjusting the number for **Label Size**. Click **Polygon Labels** for the change to take effect.

The example below is the 108th Congressional District map of public timberland acreage to all land acreage using five equal interval classes. The congressional district labels are also displayed. Notice that the titles on the maps in RPA Data Wiz are generic, only identifying the variables involved in the output and not including information indicating any choices made while creating the session.

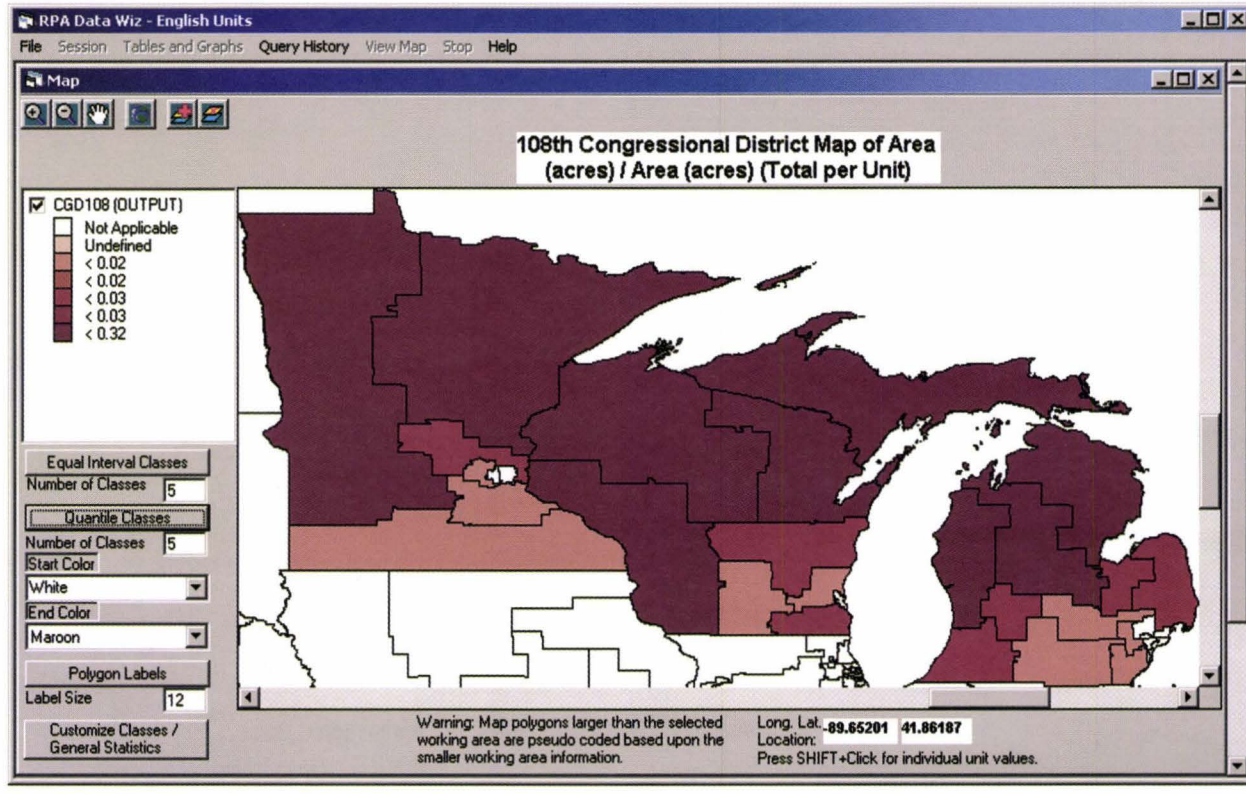

RPA Data Wiz - English Units - [Output Table]
File Session Tables and Graphs Query History View Map Stop Help
County Map
107th Congressional District Map
108th Congressional District Map
Bailey's Ecosection Map
Hydrological Accounting Unit Map
Forest Service Map
Multiple Variable - Ratios of Su
and Area (acres) as
Numerators
t)
108th Congressional District Code
Area
2601
2602
2603
2604
0.11
339
2605
0.02
7
Total acreage (sum of AEF) is 18,706,408. This is the acreage represented by all plots in this session.
Possible Units: Volume in cubic feet, Biomass in pounds, Area in acres


RPA Data Wiz - English Units
File Session Tables and Graphs Query History View Map Stop Help
Map
108th Congressional District Map of Area (acres) / Area (acres) (Total per Unit)
CGD108 (OUTPUT)
Not Applicable
Undefined
< 0.08
< 0.14
< 0.20
< 0.26
< 0.32
Equal Interval Classes
Number of Classes 5
Quantile Classes
Number of Classes 5
Start Color
White
End Color
Maroon
Polygon Labels
Label Size 12
Customize Classes / General Statistics
Warning: Map polygons larger than the selected working area are pseudo coded based upon the smaller working area information.
Long. Lat.
Location: -85.62925 41.92440
Press SHIFT+Click for individual unit values.

Quantile Map

1. Choose ***Quantile Classes*** to display a map where the classes are divided such that an equal number of geographic units occur in each class.
2. Again, change the number of classes by typing in a different number for **Number of Classes**.
3. As previously mentioned, ramp the colors by selecting the **Start Color** and **End Color**.

Again, the example is the 108th Congressional District map of public timberland acreage to all land acreage. This time, five quantile classes are applied and the congressional district polygon labels are not displayed. Notice the contrast in the colors and class intervals between this example and the last example.

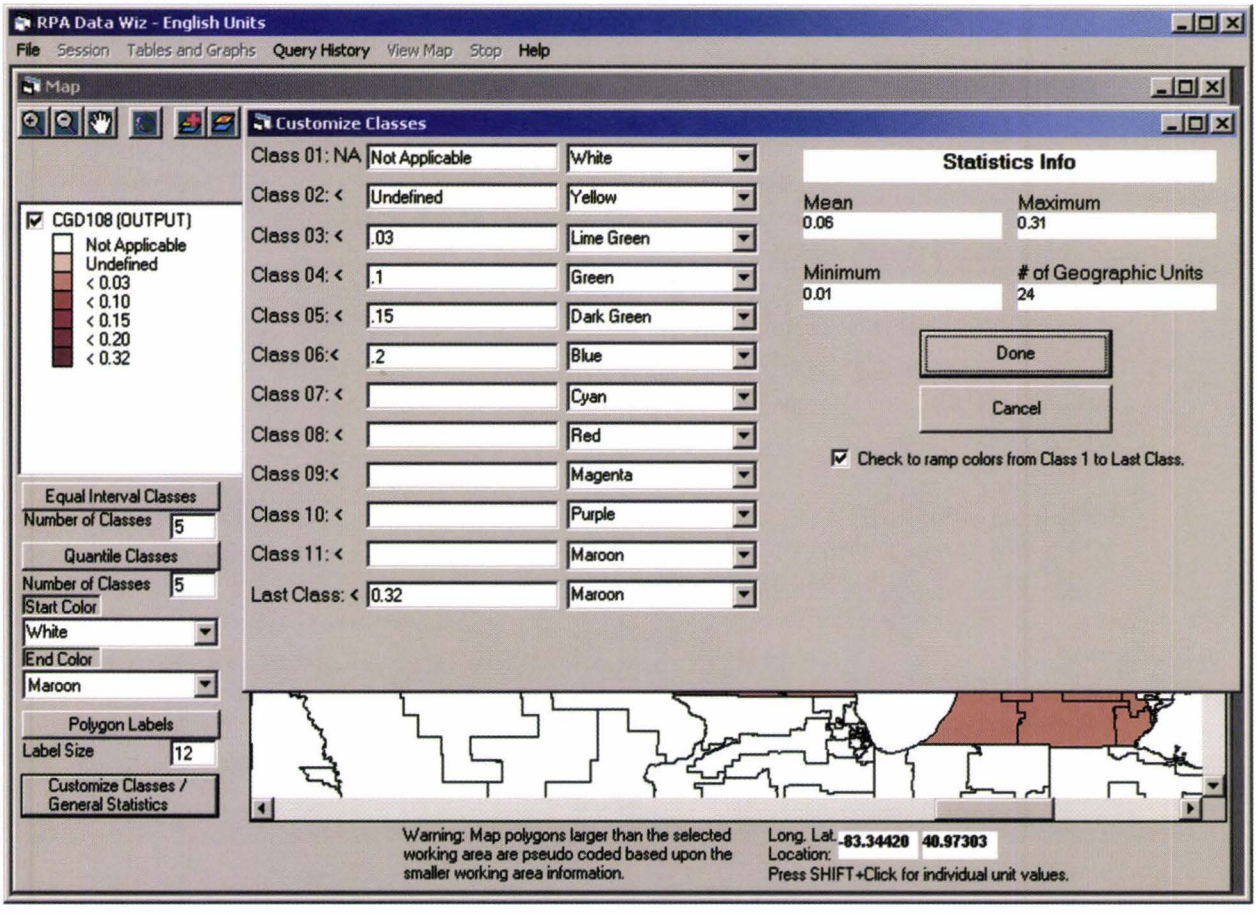


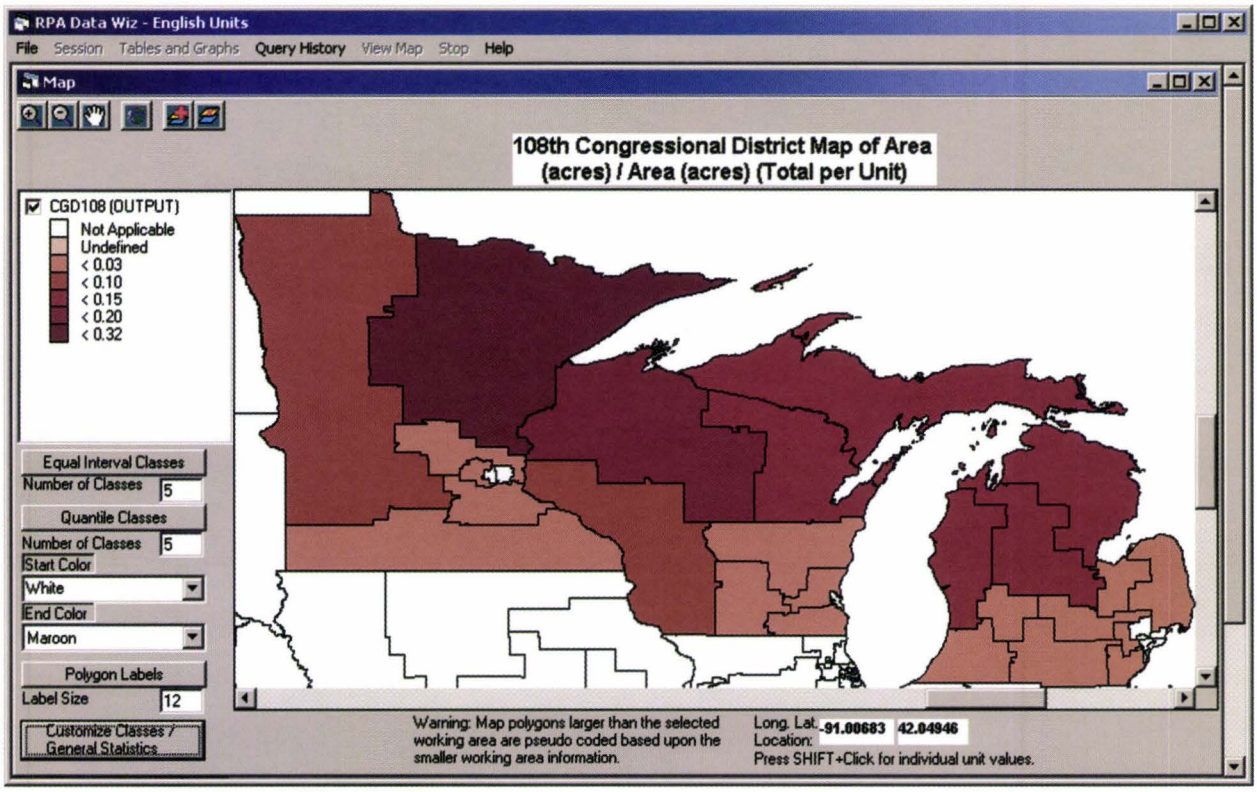
Custom Map

1. Choose **Customize Classes / General Statistics** to display a map with user-defined ranges and colors for each class.
2. Define the class breaks and pick their associated colors. Two breaks are automatically assigned. You must define at least one more break.
3. There is an option to ramp colors in this dialog. Click the **Check to ramp colors from Class 1 to Last Class** box.

The Customize Classes dialog displays some basic statistics such as the mean, minimum, and maximum of the sum variable or ratio. It also shows the number of geographic units (not counting geographic units labeled as "Not Applicable" or "Undefined") involved in the map. These statistics can help determine the distribution of

the data and how the classes should be defined. Like the two previous examples, the example below uses five classes, but the class breaks are defined differently. The same ramping color scheme is applied. Notice that this user-defined example represents the differences among the congressional districts better than the two previous examples.





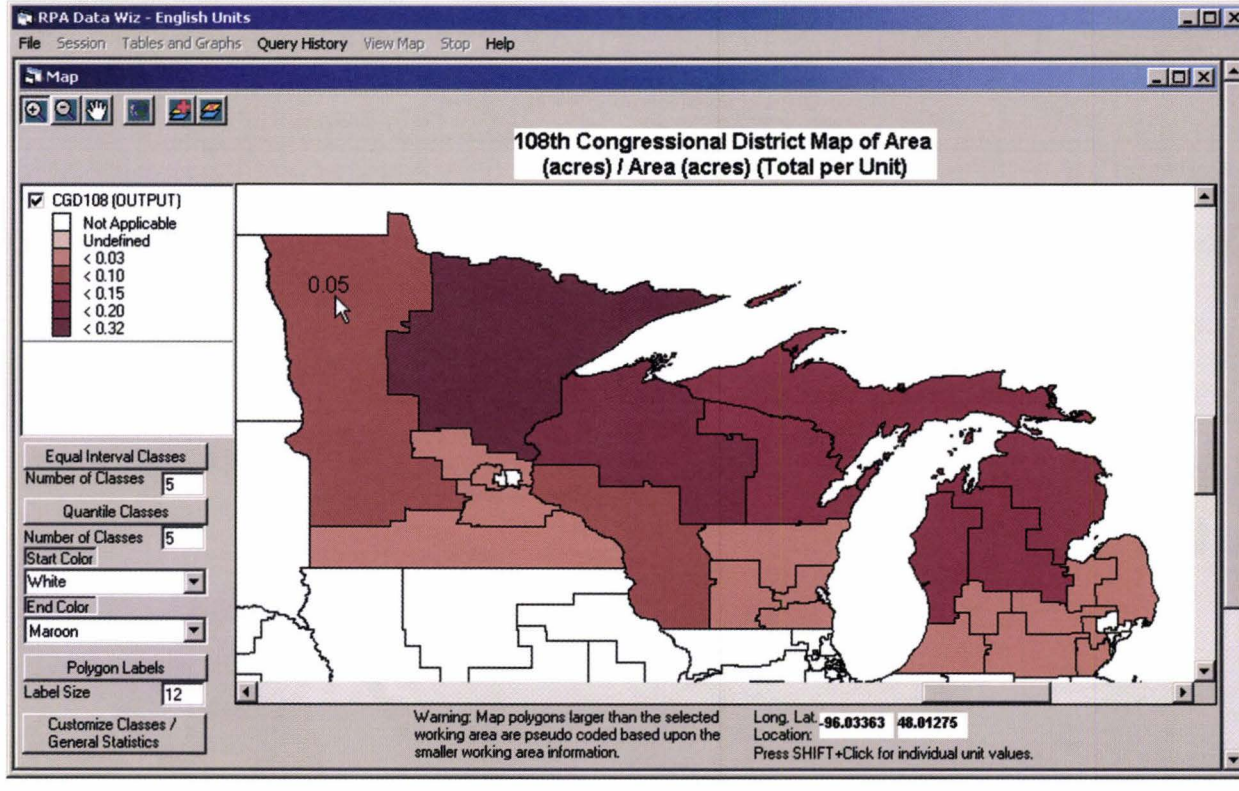
Keep in mind that you do not have to select every option before redisplaying a map. Change only the options you wish. The map will redisplay anytime one of the Equal Interval Classes, Quantile Classes, or Done (in Customize Classes dialog) buttons is clicked. In addition, the polygon labels are cleared anytime one of these buttons is clicked.

Applying the GIS Tools

The Map form in RPA Data Wiz provides a number of *Geographic Information System (GIS)* capabilities. A short definition for GIS is a system where people apply computer technology to store and manipulate geographic information. Throughout this chapter, examples have been provided showing how you can manipulate the geographic information associated with the RPA database. This section describes the GIS tools available in RPA Data Wiz that are common in most GIS computer applications.

First, notice the **Long. Lat.** (longitude measuring east-west, latitude measuring north-south) coordinates in the lower right section of the Map form. Move the cursor throughout the map extent and notice the coordinates changing. The *latitude-longitude* coordinate system is a common geographic coordinate system used to identify locations on the earth (Aronoff 1995).

Next, use the cursor to display the exact value associated with a geographic unit. Place the cursor over a polygon of interest, hold **SHIFT**, and click the left button on the mouse. The value displays. Notice that the left-most shaded polygon in the example below is associated with 0.05.



The following tools are displayed in the upper-left corner of the Map form. Placing the cursor over each tool displays a tool tip. Only one of the Zoom In, Zoom Out, or Pan tools can be active at a time. Click one of the tools and it will function with the cursor while in the map extent.

Zoom In Tool. Activate the **Zoom In Tool** by clicking it. Hold the left button on the mouse and drag the cursor over the new map extent. Release the mouse button and the map display will reflect the new area in a larger map scale (smaller map area displayed in same computer screen area).

Zoom Out Tool. Activate the **Zoom Out Tool** by clicking it. Unlike the Zoom In Tool, this tool does not allow you to delineate a box over the area of interest. Click the left button on the mouse over the point of interest to decrease the map scale by a factor of two.

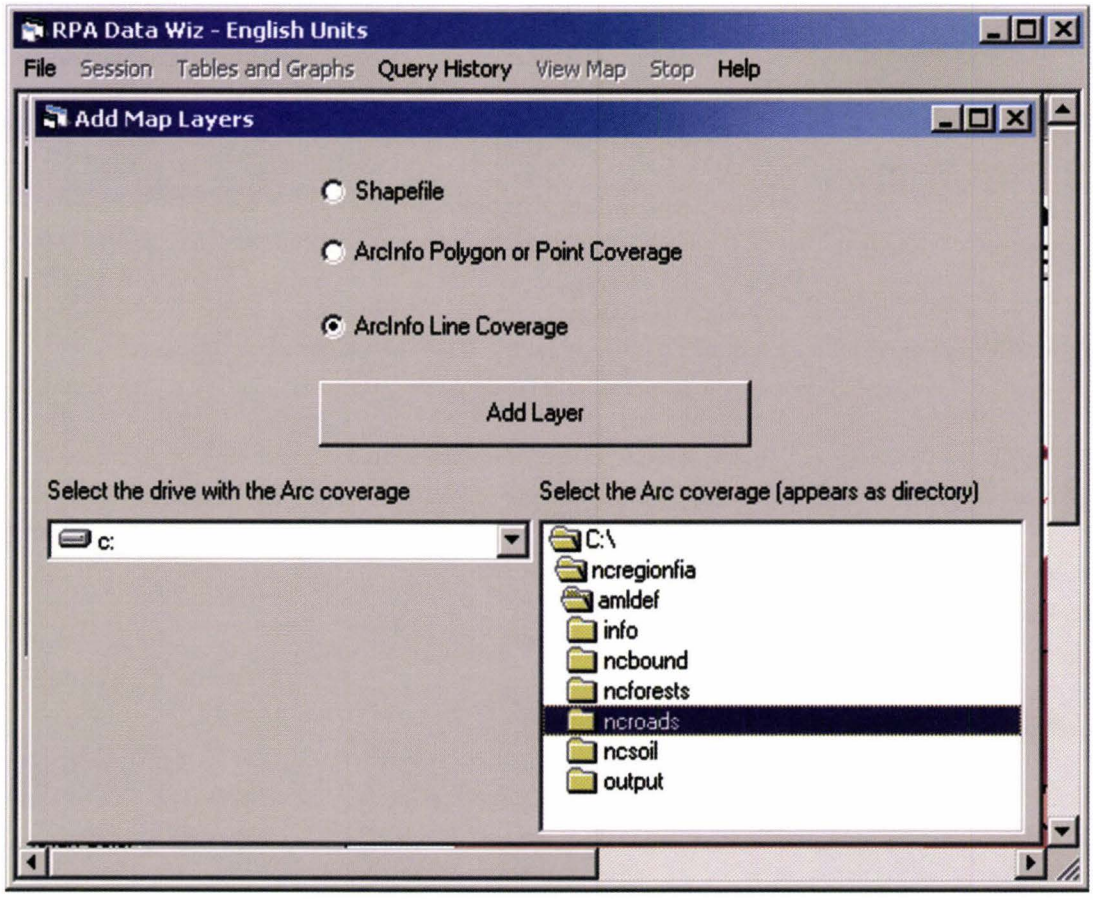
Pan Tool. Activate the **Pan Tool** by clicking it. Hold down the left button on the mouse and move the mouse from one point to another to change the map extent.

Click the next tool and it works immediately to increase the map extent.

Zoom to Full Extent Tool. Activate the **Zoom to Full Extent Tool** by clicking it. The map extent changes to show all the geographic units of every map layer present.

Click the tools below to add and delete map layers to and from the map extent. The base map (map that displays initially in the Map form) cannot be removed. All of the map layers in RPA Data Wiz are located in the RPA Data Wiz application directory (usually C:\Program Files\RPA Data Wiz\). These map layers are ArcView shapefiles. You cannot and should not add the same theme that displays as the base map. Double-clicking on an added map layer name in the legend and then choosing a new color in the Color dialog changes the color of the map layer. Any polygon shapefiles or polygon, ArcInfo *coverages* (basically a different type of map layer) are displayed with no fill color so the base map is not covered. Note that adding any map layer that does not use the latitude-longitude coordinate system will have unpredictable consequences. The map layers will not overlay correctly upon each other.

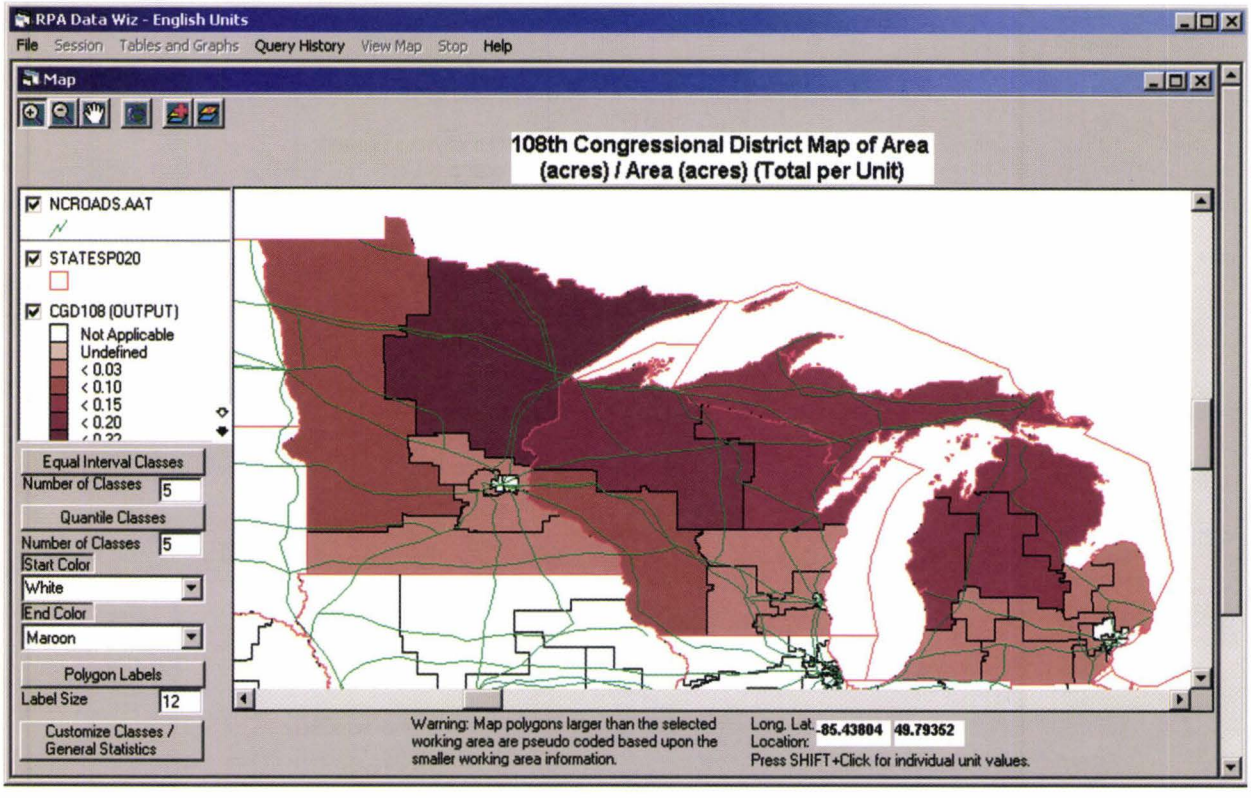
Add Map Layer Tool. Activate the **Add Map Layer Tool** by clicking it. The Add Map Layers dialog displays. Choose **Shapefile, ArcInfo Polygon** or **Point Coverage**, or **ArcInfo Line Coverage**. If Shapefile was chosen, then select **Add Layer** to use the **Open** dialog and locate the shapefile of interest. If an ArcInfo coverage option was chosen, a directory listing appears. ArcInfo coverage names will appear as directories. Select the one of interest and click **Add Layer**. Close the **Add Map Layers** dialog by clicking the upper-right "X" button on the dialog.



Delete Map Layer Tool. Remove an ancillary map layer by first clicking on its name in the legend. Now click the **Delete Map Layer Tool**.

A number of Web sites offer free digital map layers that work in RPA Data Wiz (e.g., http://data.geocomm.com and http://nationalatlas.gov/atlasftp.html).

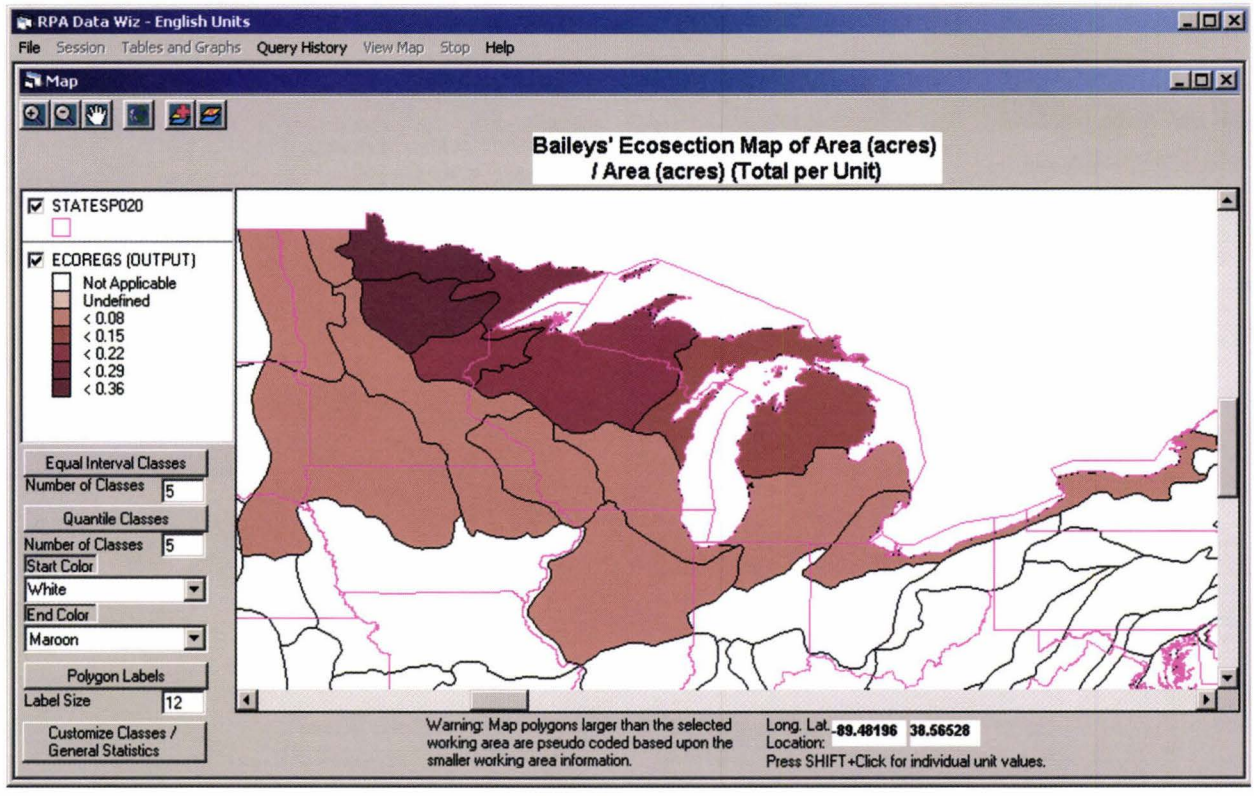
Extra map layers can provide a frame of reference. Depending on your audience and the point you are trying to make, extra map layers like roads and waterways help others relate to the maps you make in RPA Data Wiz. A number of Web sites offer free digital map layers that work in RPA Data Wiz (e.g., http://data.geocomm.com and http://nationalatlas.gov/atlasftp.html). Be sure to obtain map layers in the latitude-longitude coordinate system. A noteworthy extra map layer available with RPA Data Wiz is "statesp020." This is a State boundary map layer. The following example shows the congressional districts from previous examples with the previously mentioned state boundary map layer and a road map layer.



Warnings

Some geographic units have multiple polygons. For example, a county could be composed of an island and mainland. The island would be coded the same as the mainland area. You can usually tell if a geographic unit has multiple polygons by selecting **Polygon Labels**. Multiple polygons that are part of the same geographic unit will be labeled the same.

In the bottom section of the Map form there is a warning indicating that polygons larger than the selected working area are pseudo coded based upon the smaller working area information. What does this mean? The previous examples showed congressional districts that follow State boundaries. It was mentioned earlier that the session leading up to the examples narrowed the working RPA plots or records down to public timberland in MI, MN, and WI. In this situation, the warning does not apply because the congressional districts do not move outside of the State boundaries chosen as the selected working area. Suppose the example is changed by one factor. Instead of creating a 108th Congressional District Map, a Baileys' Ecosection Map is created. Look at the example below and note where the State boundaries (statesp020) are in comparison to the ecosection boundaries (ecoregs). Now the warning applies. Some of the ecosection geographic units extend outside of the tri-state boundary area (the smaller working area). These ecosections are coded based only upon information occurring in the tri-state area. In other words, even though the map shows ecosections extending past State boundaries, the color codes of the ecosections only reflect plot information for the selected States.



The 107th and 108th Congressional District Codes, Baileys' Ecosections, and Hydrological Accounting Units were assigned to plots using a GIS overlay analysis (appendix A). The analysis was applied using fuzzed plot locations. The fuzzed locations are usually within a mile of the true plot location. Consequently, there is some error introduced in the estimates when grouping by these variables. Furthermore, the maps associated with these variables will inherit this error. The StateCounty and Administrative Forest codes were directly assigned using the correct plot locations, so the estimates and maps associated with these grouping variables are not subject to this error.

File Menu and Map Output Options

As with tables and graphs, a number of output options are available for maps in RPA Data Wiz. The legend and the map are output separately to allow more freedom when producing a final product in another software package like Microsoft PowerPoint or Adobe Photoshop. You can import or paste the legend and map into another software package and manipulate them to suit your needs. A map title does not come with the map image. This allows you the freedom to make your own title. The map can be output as a bitmap or a Windows enhanced metafile. Windows metafiles sometimes result in a sharper image, especially when the map has many line features like roads or waterways. However, the bitmap usually handles manipulation better than the metafile. Sometimes resizing the metafile adversely alters the image. Bitmap is the safest format to use.

Exporting the Map and Legend

1. Choose **File \ Export Map** to display the **Save – Copy** dialog.
2. Select **Export to Bitmap** or **Export to Windows Enhanced Metafile**.
3. Click **Export** to save the map portion of the Map form.
4. Close the **Save - Copy** dialog by clicking the upper-right "X" button on the dialog. If you are working in PowerPoint, select **Insert \ Picture \ From File** and then choose the file.
5. Choose **File \ Export Legend** to save the legend as a bitmap. The output files can be saved to any available directory, but the default directory is "temp" in the RPA Data Wiz application folder.

Copying the Map and Legend to the Windows Clipboard

1. Select **File \ Copy Map to Clipboard** to display the **Save – Copy** dialog. The clipboard holds copied objects in memory and not as files. Consequently, you are not asked to save to a file.
2. Select **Copy as Bitmap** or **Copy as Windows Enhanced Metafile**.
3. Click **Copy Map to Clipboard** to copy the map portion of the Map form to the Windows clipboard.
4. Close the **Save - Copy** dialog by clicking the upper-right "X" button on the dialog. Now you can paste the map into another software program. If you are working in PowerPoint and you chose bitmap, we recommend you choose **Edit \ Paste Special...** and select **Device Independent Bitmap**. If you are working in PowerPoint and you chose Windows enhanced metafile, we recommend you choose **Edit \ Paste Special...** and select **Picture (Enhanced Metafile)**.
5. Choose **File \ Copy Legend to Clipboard** to automatically copy the legend to the clipboard. The legend only copies in the bitmap format. The legend is now ready to be pasted into another software program. In PowerPoint, choose **Edit \ Paste Special...** and select **Device Independent Bitmap**.

Whether you are opening the image from a saved file or you are pasting from the clipboard, you may need to resize the map to fit your area of interest. This is usually done by selecting the pasted image and then changing the size properties of the image or by clicking on a corner of the image and dragging it. In PowerPoint, select **Format \ Picture \ Size** and change the size making sure not to change the east-west and north-south dimensions disproportionately.

Select **File \ Print Map** to display the Print dialog and print the map portion of the Map form. The legend and title will not be printed. Landscape is the recommended and default orientation.

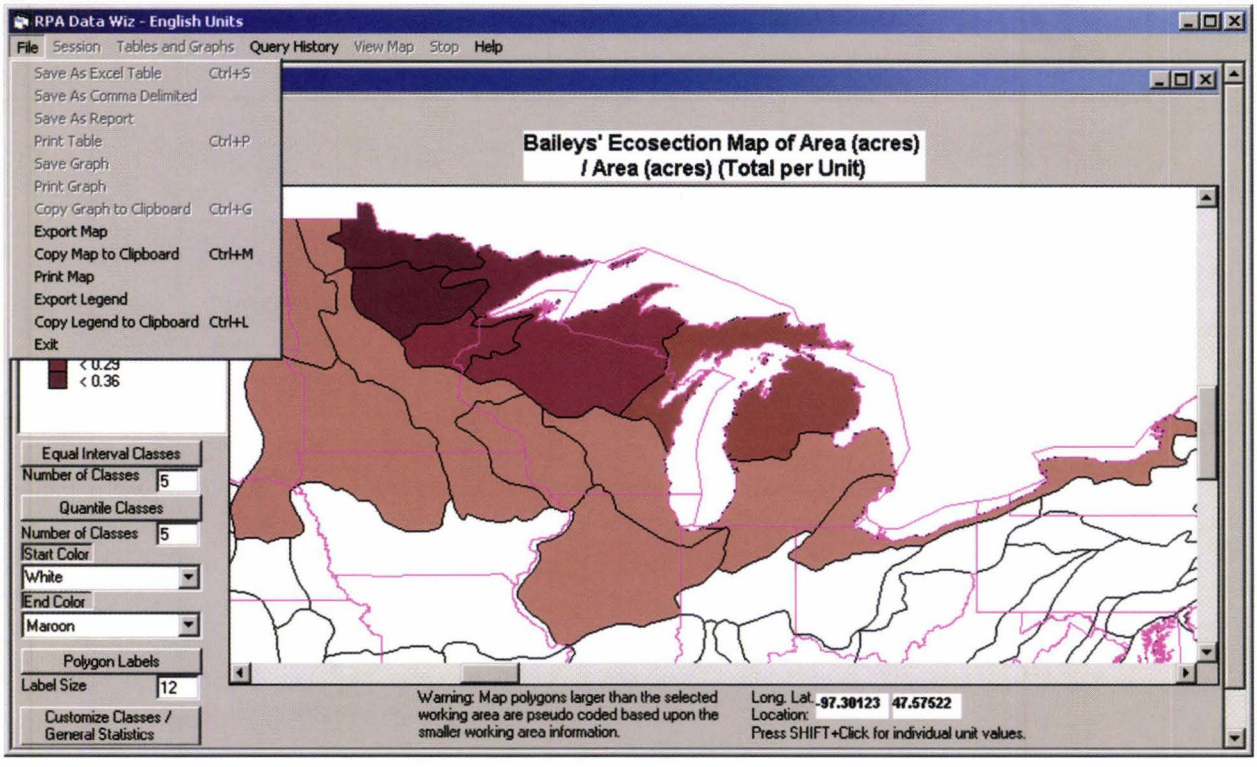

RPA Data Wiz - English Units
File Session Tables and Graphs Query History View Map Stop Help
Save As Excel Table Ctrl+S
Save As Comma Delimited
Save As Report
Print Table Ctrl+P
Save Graph
Print Graph
Copy Graph to Clipboard Ctrl+G
Export Map
Copy Map to Clipboard Ctrl+M
Print Map
Export Legend
Copy Legend to Clipboard Ctrl+L
Exit
Baileys' Ecosection Map of Area (acres) / Area (acres) (Total per Unit)
< 0.29
< 0.36
Equal Interval Classes
Number of Classes 5
Quantile Classes
Number of Classes 5
Start Color
White
End Color
Maroon
Polygon Labels
Label Size 12
Customize Classes / General Statistics
Warning: Map polygons larger than the selected working area are pseudo coded based upon the smaller working area information.
Long. Lat. -97.30123 47.57522
Location:
Press SHIFT+Click for individual unit values.

Figure 1 is an example of a final product produced in less than 15 minutes in PowerPoint. Notice that this is the example map presented in "View Map." The map layer, statesp020, that comes with RPA Data Wiz was added in the Map form and the class intervals were customized (used Customize Classes dialog) to bring out the contrast among the congressional districts. The map and legend were each copied to the clipboard and pasted into PowerPoint as bitmaps. A north arrow was added from the clip art in PowerPoint. Text was added to label the states. Finally, a new title was created and the legend was labeled as "Legend."

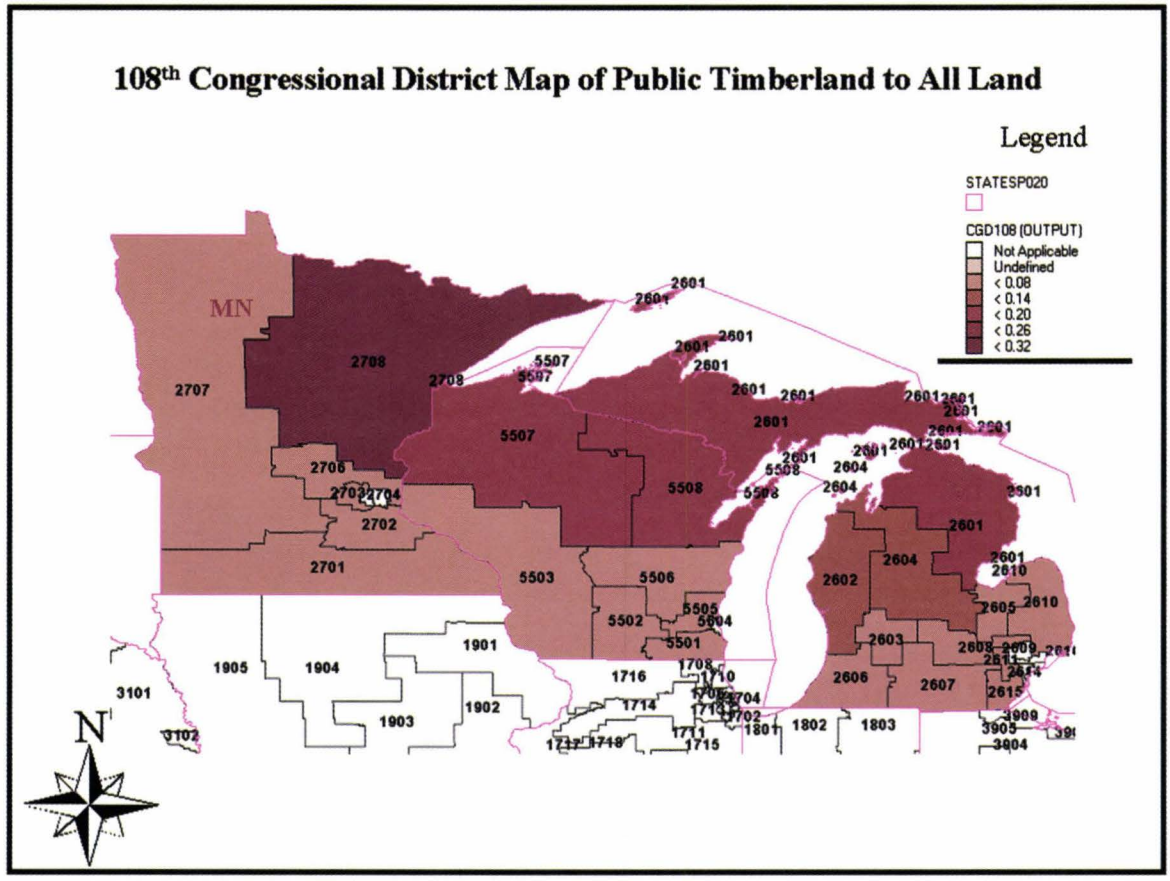


Figure 1.—*Final map produced using RPA Data Wiz and Microsoft PowerPoint.*

Quantile and Equal Interval Mapping – Discussion and Notes

Theoretically, *quantile classes* have an equal number of geographic units. The total number of geographic units is divided by the total number of classes to come up with the number of units in each class. If you have 16 units and you want to group them into 4 quantile classes, then there should be 4 units in each class. The first class should have the first 25 percent of the units. The second class should have the next 25 percent of the units and so forth. The values of the variable in question (e.g., acreage) are sorted and each geographic unit is placed in a class based upon the relative magnitude of its value (fig. 2 and table 1). Practically, there are some complications with the definition given and RPA Data Wiz compensates for these complications.

Theoretically, *equal interval classes* have an equal range of values. The range of data values (*max - min*) is divided by the total number of classes to determine the range of values in each class (fig. 2 and table 1). Again, there are some complications with this definition and RPA Data Wiz compensates for these.

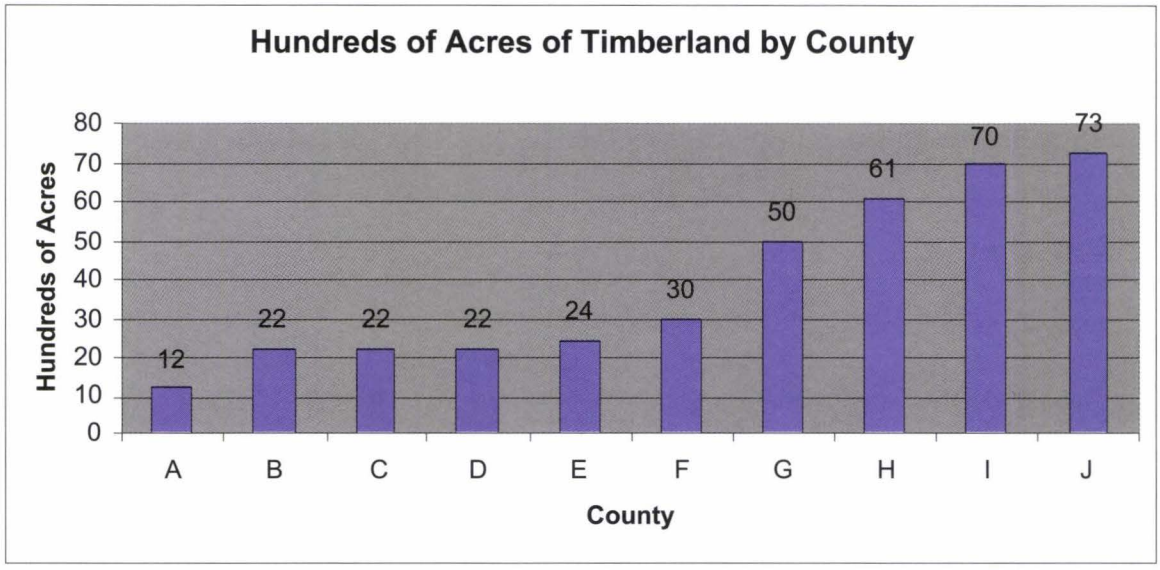


Figure 2.—*Histogram of hundreds of acres of timberland by county.*

Table 1.—*Comparison of quantile and equal interval mapping techniques using figure 2.*

Classes	Quantiles				Equal intervals			
	Theoretical counties	Theoretical ranges	Wiz counties	Wiz legend	Theoretical counties	Theoretical ranges	Wiz counties	Wiz legend
Class 1	AB	12 - 22	ABCD	< 23	ABCDE	12 - 24	ABCDE	< 25
Class 2	CD	22 - 22		< 23	F	25 - 36	F	< 37
Class 3	EF	24 - 30	EF	< 31		37 - 48		< 49
Class 4	GH	50 - 61	GH	< 62	G	49 - 60	G	< 61
Class 5	IJ	70 - 73	IJ	< 74	HI	61 - 72	HIJ	< 74

Quantile Class Exceptions

In RPA Data Wiz, there are some exceptions to the definition of quantile classes. First, if the resulting quotient is not an integer, then the quotient is truncated. Consequently, there may not be an equal number of geographic units per class. For example, if there are only 10 geographic units and 6 classes are requested, the result is 1 (10/6 = 1.66, truncated to 1) geographic unit per class (fig. 2 and table 2). With 6 classes and 1 geographic unit per class, only 6 of the 10 geographic units are recognized. In this situation, RPA Data Wiz puts 5 geographic units in the last class with the greatest upper limit. The last class will have a disproportionately greater number of geographic units. RPA Data Wiz does not round quotients up; the result would be a deficient number of classes (2 geographic units in the previous example results in only 5 classes). As the ratio of geographic units to classes increases, this exception has less of an effect. Most of the time, you will be working with enough geographic units to make the effects of this exception minimal.

Table 2.—*Quantile mapping using 6 classes and a truncated range of 1 with data from figure 2*

Classes	Quantiles			
	Theoretical counties	Theoretical ranges	Wiz counties	Wiz legend
Class 1	A	12 - 12	A	< 13
Class 2	B	22 - 22	BCD	< 23
Class 3	C	22 - 22		< 23
Class 4	D	22 - 22		< 23
Class 5	E	24 - 24	E	< 25
Class 6	F	30 - 30	FGHIJ	< 74

The second exception occurs when more than 1 class has the same upper limit. Notice in table 1 that Class 1 and Class 2 each have 22 as the upper limit in the "Theoretical Ranges" column. The problem becomes worse when using more classes. Notice in table 2 that now there are 3 classes with 22 as the theoretical upper limit. Geographic units with the same value can belong to different classes using the quantile mapping technique. However, RPA Data Wiz keeps all the geographic units with the same values in the same class and displays them with the same color even though the legend indicates there are multiple classes for the same value. Figure 3 shows a quantile classification where 4 different classes have the same upper limit of 0.01, but all counties in the map with 0.01 are shaded with the same color (the topmost color for 0.01 in the legend).

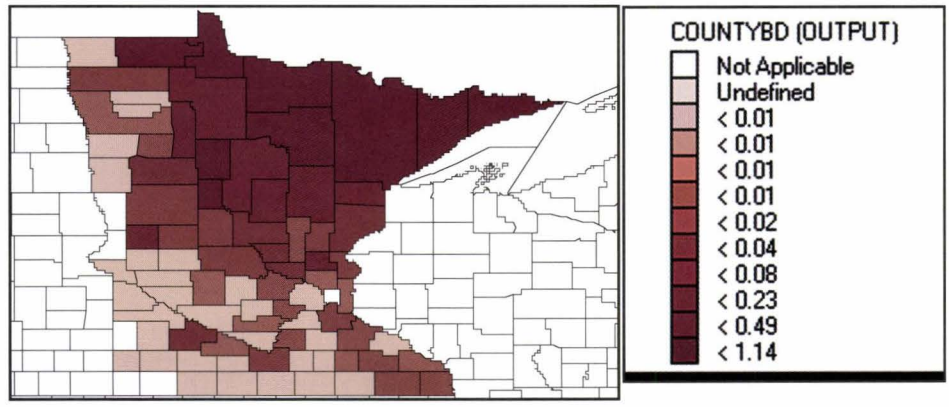


Figure 3.—*Quantile map of SW to HW cubic-foot volume on timberland in MN.*

Equal Interval Class Exceptions

The equal interval mapping technique in RPA Data Wiz can result in exceptions to the definition (fig. 2 and table 1). As previously mentioned, the range is divided by the number of requested classes. If the quotient is not an integer, then the quotient is rounded to the nearest integer. In table 1 and figure 2, the range is 61 (73 – 12) and the quotient is 12.2 (61/5). Consequently, the quotient is rounded to provide a class interval of 12. When rounding down, some geographic units with high values may not be recognized in the last class. In table 1, County J does not make it into the "Theoretical Counties" column. When rounding up, the uppermost limit of the greatest class can result in a value greater than the maximum value of the geographic units. RPA Data Wiz violates the equal interval class definition and always uses the maximum value to define the uppermost limit of the greatest class. Consequently, the interval for the greatest class may not equal the interval used for all the other classes. This ensures that all geographic units are accounted for and the uppermost limit in the legend provides extra information (working with all values except ratios the uppermost limit is 1 more than the maximum value; the uppermost limit working with ratios is 0.01 more than the maximum value).

Creating the Most Informative Map

When creating your map, you should usually focus on the following rules:

- Maximize the between-class differences
- Minimize the within-class differences

Quantile or equal interval maps can sometimes meet the previous criteria. However, problems do arise with these techniques. The quantile mapping technique can place geographic units with the same value in different classes and it can group geographic units with drastically different values in the same class (table 1). The equal interval mapping technique can create classes that contain no geographic units (Class 3 in table 1, Classes 3 and 4 in table 2). The Customize Classes dialog allows you to overcome these problems by entering your own class breaks derived by any means you choose. The easiest way to observe the previous rules is to study the data in the table and find the naturally occurring breaks. You may wish to export the data to a spreadsheet and then sort it to find the natural breaks. After identifying these breaks, you can enter them in the Customize Classes dialog.

There may be times when you are not concerned with maximizing the differences among groups that appear naturally in a map. For example, you may be only interested in highlighting geographic units that are above or below some threshold value. In this case, you may elect to group everything into two classes even though there may be a number of naturally occurring groups in each of these classes. Ultimately, your objectives will dictate the number and location of class breaks for your map.

Chapter 6
Tutorials

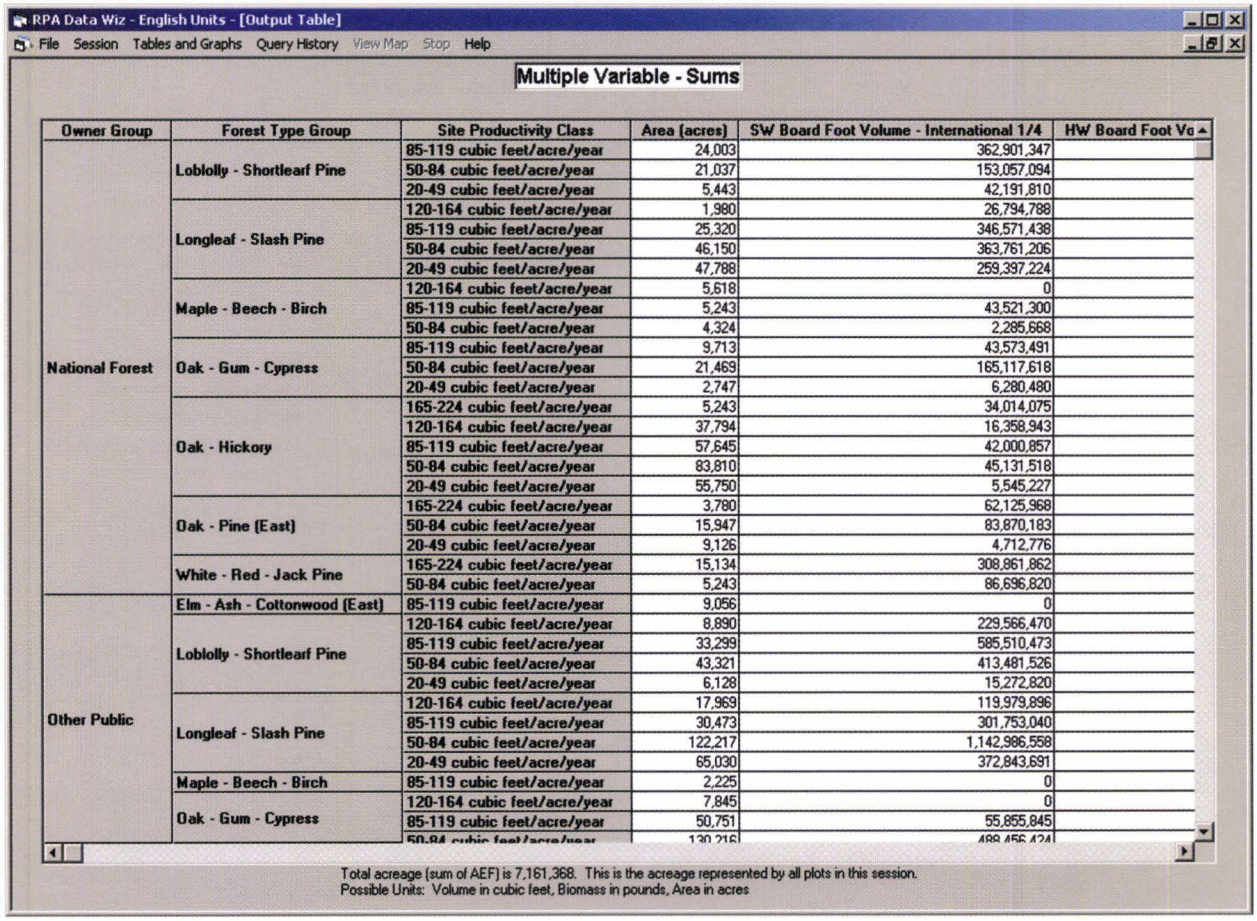
The tutorials are provided to give step-by-step examples of applying RPA Data Wiz. However, the tutorials are not meant to cover every aspect of RPA Data Wiz and they do not come with many detailed explanations of features and techniques. Refer to rest of this manual for this type of information.

Exercise 1: Tables and Graphs

This exercise will help you become familiar with the tables and graphs in RPA Data Wiz. This will be an exploratory analysis of some of the information for the Southeast Assessment Subregion.

Multiple Variable Sums Table

1. If RPA Data Wiz is not already running, then start it. Typical way is to select **Start \ Programs \ RPA Data Wiz**.
2. Click in the gray area of the initial screen to start.
3. If you have the English and metric versions, then pick one of them.
4. Choose **Session \ New Session**.
5. Select **Southeast Assessment Subregion** in Select RPA Subregion(s).
6. Click **Done Selecting RPA Subregion(s)**.
7. Choose **Land Cover Class** in RPA Variable Selection.
8. Select **Forest Land** in Select Field Value(s).
9. Click **Done Selecting Field Value(s)**.
10. Choose **Mean Stand Dia 2" Class or Larger** (5 cm class or larger for metric version) in RPA Variable Selection.
11. Select all values greater than or equal to 10 in Select Field Value(s). Hold **SHIFT** and click on **10** or the next highest number available. Keep holding **SHIFT** and scroll to the bottom of the list and click on the greatest value.
12. Click **Done Selecting Field Value(s)**.
13. Choose **Done Selecting** in RPA Variable Selection.
14. Create a multivariable sums table.
    A. Choose **Tables and Graphs \ Multiple Variable Tables and Graphs**. The Multiple Variable Sums Table and Graph Generator dialog appears.
    B. In order, select **Owner Group**, **Forest Type Group**, and **Site Productivity Class** for the grouping variable. Click each separately with the mouse without using any other keys. If you have accidentally chosen a variable, then deselect it by clicking on it a second time.
    C. Select all of the sum variables. Click on the first variable, **Area**. Scroll down to the bottom of the list. Hold SHIFT and click the last variable. All the sum variables are chosen.
    D. Select **Add number of samples as extra column**.
    E. Choose **Create Summary Table** (see example below). Make sure your form sizes are maximized to see the table well (click on box in upper right-hand corner of each form to maximize size). Scroll through the table and investigate the information. The last column contains the number of samples associated with the estimates in each row. This provides a measure of accuracy for the estimates. Notice that many rows have a low number of associated plots. The confidence in the corresponding estimates is low.
    F. Choose **File** in the main menu and notice the options for table output. Experiment with these options. Microsoft Excel tables can only be produced if you have Excel on your computer.


RPA Data Wiz - English Units - [Output Table]

File Session Tables and Graphs Query History View Map Stop Help

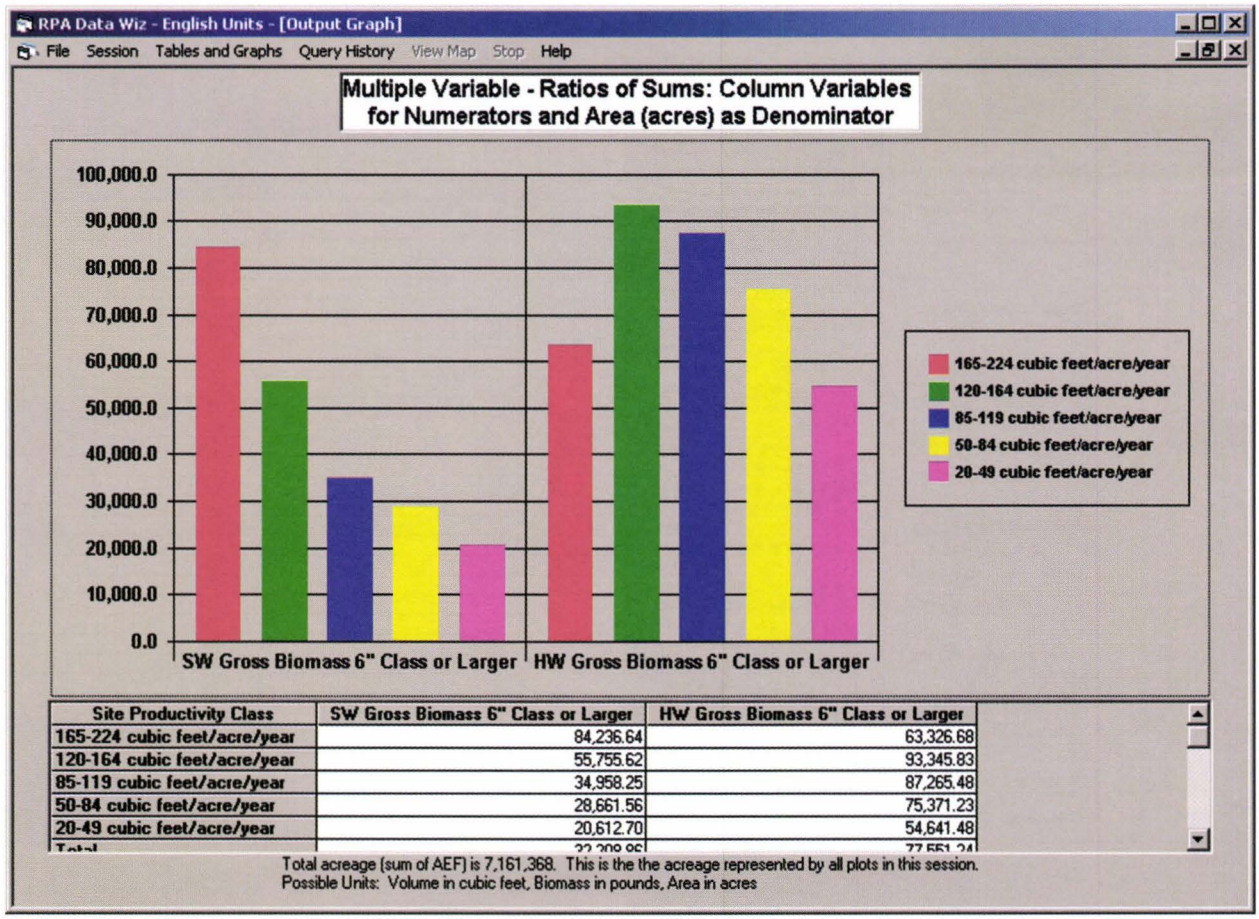
Multiple Variable - Sums

Owner Group	Forest Type Group	Site Productivity Class	Area (acres)	SW Board Foot Volume - International 1/4	HW Board Foot Vo
National Forest	Loblolly - Shortleaf Pine	85-119 cubic feet/acre/year	24,003	362,901,347	
		50-84 cubic feet/acre/year	21,037	153,057,094	
		20-49 cubic feet/acre/year	5,443	42,191,810	
	Longleaf - Slash Pine	120-164 cubic feet/acre/year	1,980	26,794,788	
		85-119 cubic feet/acre/year	25,320	346,571,438	
		50-84 cubic feet/acre/year	46,150	363,761,206	
		20-49 cubic feet/acre/year	47,788	259,397,224	
	Maple - Beech - Birch	120-164 cubic feet/acre/year	5,618	0	
		85-119 cubic feet/acre/year	5,243	43,521,300	
		50-84 cubic feet/acre/year	4,324	2,285,668	
	Oak - Gum - Cypress	85-119 cubic feet/acre/year	9,713	43,573,491	
		50-84 cubic feet/acre/year	21,469	165,117,618	
		20-49 cubic feet/acre/year	2,747	6,280,480	
	Oak - Hickory	165-224 cubic feet/acre/year	5,243	34,014,075	
		120-164 cubic feet/acre/year	37,794	16,358,943	
		85-119 cubic feet/acre/year	57,645	42,000,857	
		50-84 cubic feet/acre/year	83,810	45,131,518	
		20-49 cubic feet/acre/year	55,750	5,545,227	
	Oak - Pine (East)	165-224 cubic feet/acre/year	3,780	62,125,968	
		50-84 cubic feet/acre/year	15,947	83,870,183	
		20-49 cubic feet/acre/year	9,126	4,712,776	
	White - Red - Jack Pine	165-224 cubic feet/acre/year	15,134	308,861,862	
		50-84 cubic feet/acre/year	5,243	86,696,820	
Other Public	Elm - Ash - Cottonwood (East)	85-119 cubic feet/acre/year	9,056	0	
	Loblolly - Shortleaf Pine	120-164 cubic feet/acre/year	8,890	229,566,470	
		85-119 cubic feet/acre/year	33,299	585,510,473	
		50-84 cubic feet/acre/year	43,321	413,481,526	
		20-49 cubic feet/acre/year	6,128	15,272,820	
	Longleaf - Slash Pine	120-164 cubic feet/acre/year	17,969	119,979,896	
		85-119 cubic feet/acre/year	30,473	301,753,040	
		50-84 cubic feet/acre/year	122,217	1,142,986,558	
		20-49 cubic feet/acre/year	65,030	372,843,691	
	Maple - Beech - Birch	85-119 cubic feet/acre/year	2,225	0	
	Oak - Gum - Cypress	120-164 cubic feet/acre/year	7,845	0	
		85-119 cubic feet/acre/year	50,751	55,855,845	
		50-84 cubic feet/acre/year	130,216	488,456,424	

Total acreage (sum of AEF) is 7,161,368. This is the acreage represented by all plots in this session.
Possible Units: Volume in cubic feet, Biomass in pounds, Area in acres

Multiple Variable Sums Graph

1. Choose **Tables and Graphs \ Multiple Variable Tables and Graphs**. The Multiple Variable Sums Table and Graph Generator dialog appears.
2. Select **Site Productivity Class** for the grouping variable. Select only one grouping variable when producing graphs.
3. Select **SW Gross Biomass 6" Class or Larger** and **HW Gross Biomass 6" Class or Larger** for the sum variables. Scroll down to find the variables. Hold **CTRL** and click each variable.
4. Select **Area** as the optional ratio variable (under "Optional, only for Ratio of Sums:").
5. Choose **Create Graph** (see example below). Make sure your form sizes are maximized to see the graph well (click on box in upper right-hand corner of each form to maximize size).
   A. Click on a series in the graph or in the legend to highlight the corresponding row in the table.
6. Select **File** in the main menu and notice there are options to output the table and the graph.
7. Output the graph to another software package.
   A. Choose **Copy Graph to Clipboard** or press **CTRL + G** to copy the graph as a Windows metafile to the Windows clipboard. The data in the graph are also pasted into memory. Depending upon where and how you perform a paste, the data or the image of the graph are pasted.
   B. Open another software package like Microsoft Excel.
   C. If you are working in Excel, then select **Edit \ Paste** to paste the number data in the spreadsheet. Note that the row heading may not paste with the rest of the data. This appears to be a Microsoft bug in the software.
   D. Paste an image of the graph. In Excel, choose **Edit \ Paste Special...** and select the **Bitmap** type. In Microsoft PowerPoint, choose **Edit \ Paste Special...** and select **Device Independent Bitmap**.

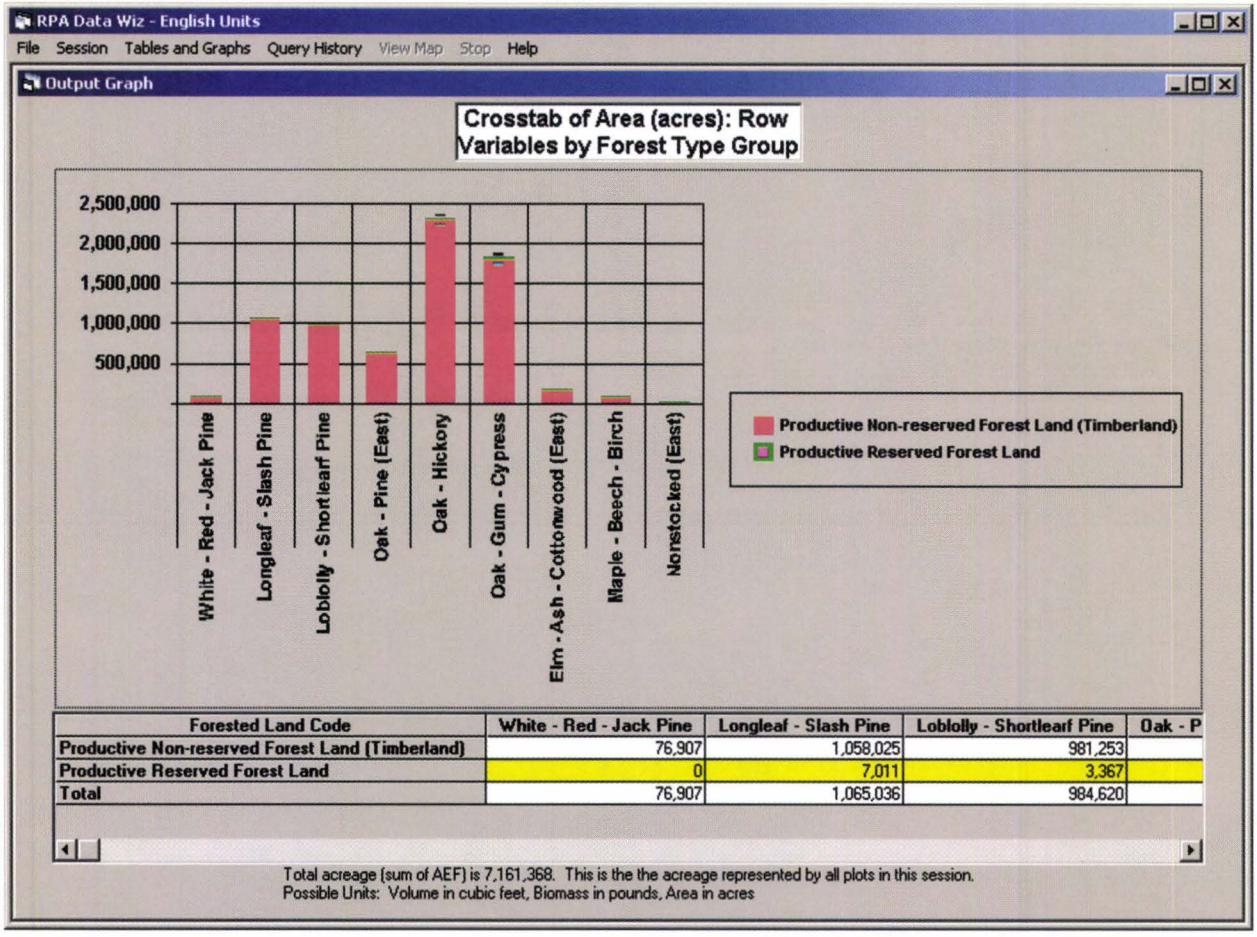


Site Productivity Class	SW Gross Biomass 6" Class or Larger	HW Gross Biomass 6" Class or Larger
165-224 cubic feet/acre/year	84,236.64	63,326.68
120-164 cubic feet/acre/year	55,755.62	93,345.83
85-119 cubic feet/acre/year	34,958.25	87,265.48
50-84 cubic feet/acre/year	28,661.56	75,371.23
20-49 cubic feet/acre/year	20,612.70	54,641.48
Total	22,209.86	77,551.24

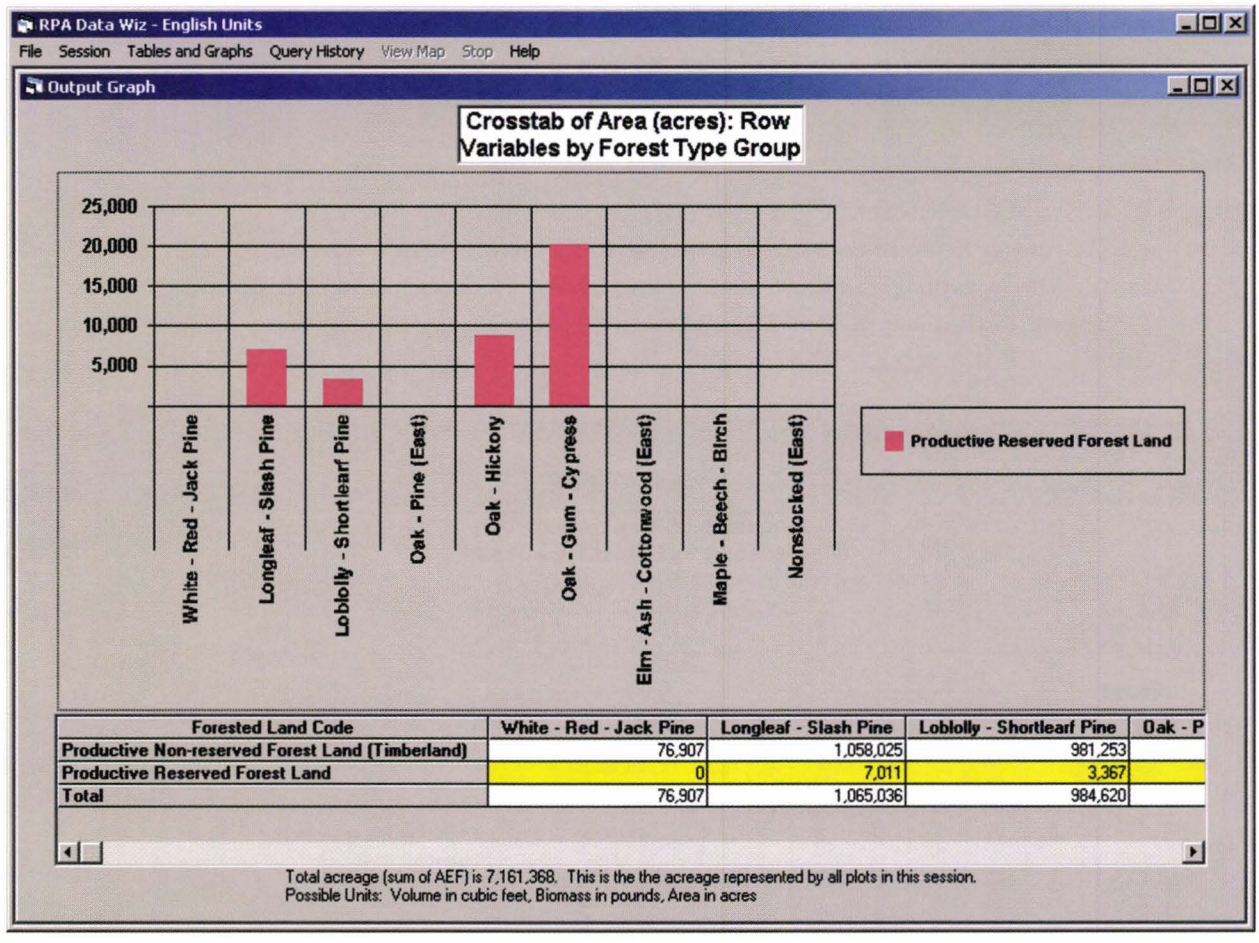
Total acreage (sum of AEF) is 7,161,368. This is the the acreage represented by all plots in this session.
Possible Units: Volume in cubic feet, Biomass in pounds, Area in acres

Crosstab Graphs

1. Choose **Tables and Graphs \ Crosstab Tables and Graphs**.
2. Select **Forested Land Code** for the grouping variable.
3. Select **Forest Type Group** for the pivot variable.
4. Choose **Area** for the sum variable.
5. Choose **Create Graph** (see example below).
6. Select **Productive Reserved Forest Land** in the legend. The corresponding row is highlighted in the table. This series occupies much less area than the other series. As a result, this series is hard to distinguish on the graph. This problem is solved in the following step.


RPA Data Wiz - English Units
File Session Tables and Graphs Query History View Map Stop Help
Output Graph
Crosstab of Area (acres): Row Variables by Forest Type Group
2,500,000
2,000,000
1,500,000
1,000,000
500,000
White - Red - Jack Pine
Longleaf - Slash Pine
Loblolly - Shortleaf Pine
Oak - Pine (East)
Oak - Hickory
Oak - Gum - Cypress
Elm - Ash - Cottonwood (East)
Maple - Beech - Birch
Nonstocked (East)
Productive Non-reserved Forest Land (Timberland)
Productive Reserved Forest Land
Forested Land Code | White - Red - Jack Pine | Longleaf - Slash Pine | Loblolly - Shortleaf Pine | Oak - P
Productive Non-reserved Forest Land (Timberland) | 76,907 | 1,058,025 | 981,253
Productive Reserved Forest Land | 0 | 7,011 | 3,367
Total | 76,907 | 1,065,036 | 984,620
Total acreage (sum of AEF) is 7,161,368. This is the the acreage represented by all plots in this session.
Possible Units: Volume in cubic feet, Biomass in pounds, Area in acres

7. Hold **SHIFT** and click on the **Productive Reserved Forest Land** series again. The graph changes to only show the Productive Reserved Forest Land series (see example below). The scale bar changes to provide more detail.
8. Some annoying selection brackets are present on the graph. Click within the dotted line but off from the bars or legend to remove these selection brackets from the display.
9. Click outside the graph outline (outside the dotted line) to restore the display to the original graph.
10. Select **File** in the main menu to see the options for output.

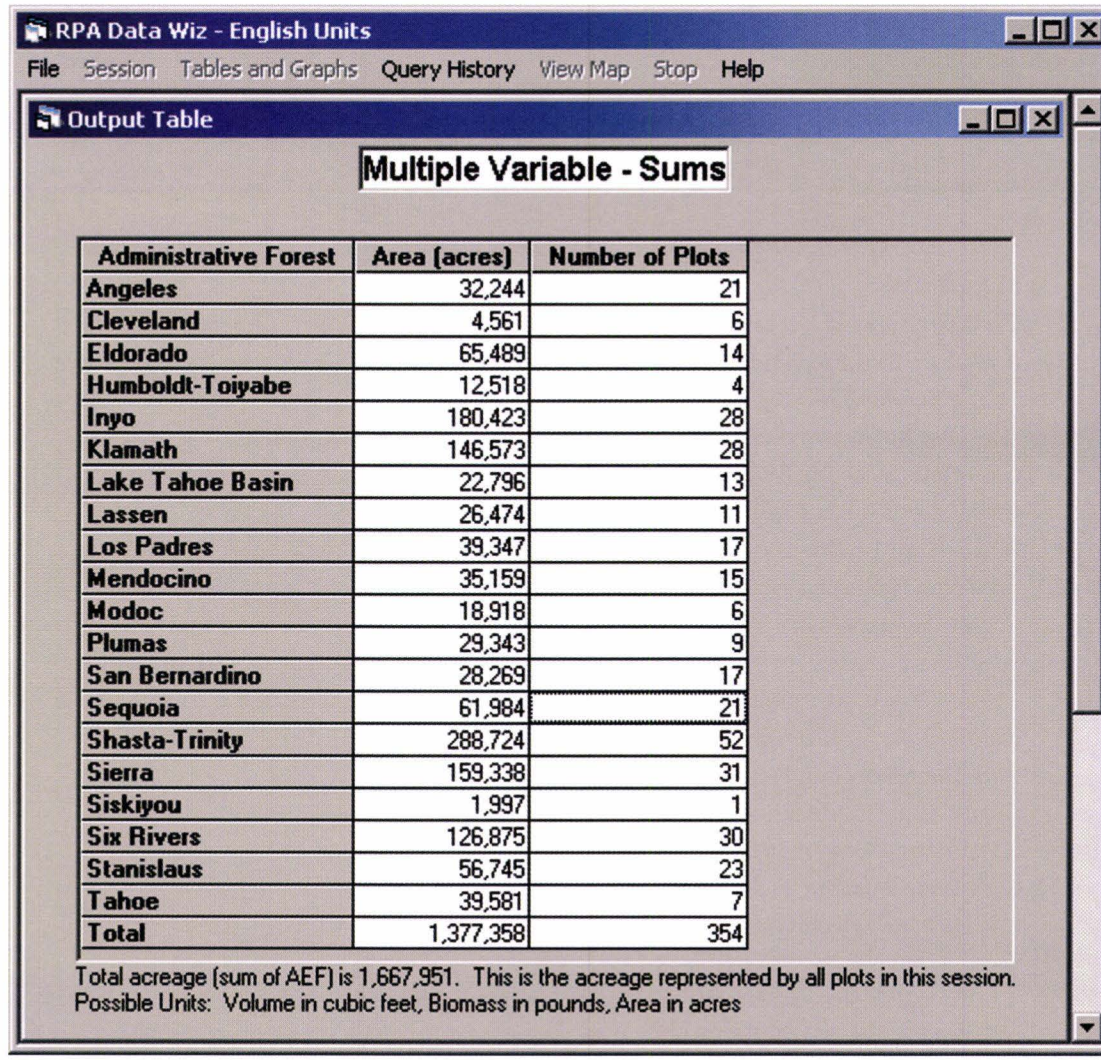

RPA Data Wiz - English Units
File Session Tables and Graphs Query History View Map Stop Help
Output Graph
Crosstab of Area (acres): Row Variables by Forest Type Group
25,000
20,000
15,000
10,000
5,000
White - Red - Jack Pine
Longleaf - Slash Pine
Loblolly - Shortleaf Pine
Oak - Pine (East)
Oak - Hickory
Oak - Gum - Cypress
Elm - Ash - Cottonwood (East)
Maple - Beech - Birch
Nonstocked (East)
Productive Reserved Forest Land
Total acreage (sum of AEF) is 7,161,368. This is the the acreage represented by all plots in this session.
Possible Units: Volume in cubic feet, Biomass in pounds, Area in acres

Forested Land Code	White - Red - Jack Pine	Longleaf - Slash Pine	Loblolly - Shortleaf Pine	Oak - P
Productive Non-reserved Forest Land (Timberland)	76,907	1,058,025	981,253	
Productive Reserved Forest Land	0	7,011	3,367	
Total	76,907	1,065,036	984,620	

Exercise 2: Maps

This exercise will help you become familiar with the maps in RPA Data Wiz. You will create a map showing the amount of area of "old" (250 years and older) forest stands on lands administered by the USDA Forest Service in the Pacific Southwest Assessment Subregion. In RPA Data Wiz, most of the administrated lands throughout the United States are national forests. Other administered lands include areas like national grasslands.

1. If RPA Data Wiz is not already running, then start it. Typical way is to select **Start \ Programs \ RPA Data Wiz**.
2. Click in the gray area of the initial screen to start.
3. If you have the English and metric versions, then pick one of them.
4. Choose **Session \ New Session**.
5. Select **Pacific Southwest Assessment Subregion** in Select RPA Subregion(s).
6. Click **Done Selecting RPA Subregion(s)**.
7. Choose **Land Cover Class** in RPA Variable Selection.
8. Select **Forest Land** in Select Field Value(s).
9. Click **Done Selecting Field Value(s)**.
10. Choose **Ageclass** in RPA Variable Selection.
11. Select all values greater than or equal to 250 in Select Field Value(s). Hold **SHIFT** and click on **250** or the next highest number if 250 is unavailable. Keep holding **SHIFT** and scroll to the bottom of the list and click on the greatest value.
12. Click **Done Selecting Field Value(s)**.
13. Choose **Stand Size Class** in RPA Variable Selection.
14. Select **Large Diameter** in Select Field Value(s).
15. Click **Done Selecting Field Value(s)**.
16. Choose **Done Selecting** in RPA Variable Selection.
17. Create a multivariable sums table.
    A. Choose **Tables and Graphs \ Multiple Variable Tables and Graphs**. The Multiple Variable Sums Table and Graph Generator dialog appears.
    B. Select **Administrative Forest** for the grouping variable. Notice the note on the right side of the dialog that states which grouping variables have associated maps. It also points out that only one sum variable can be mapped. A ratio can also be mapped.
    C. Select **Area** for the sum variable.
    D. Select **Add number of samples as extra column**.
    E. Choose **Create Summary Table** (see example below). Compare the total area listed in the **Total** row to the total area listed in the bottom of the **Output Table** form. U.S. Administrative Forests represent most of the forest land in the subregion.


RPA Data Wiz - English Units
File Session Tables and Graphs Query History View Map Stop Help
Output Table
Multiple Variable - Sums

Administrative Forest	Area (acres)	Number of Plots
Angeles	32,244	21
Cleveland	4,561	6
Eldorado	65,489	14
Humboldt-Toiyabe	12,518	4
Inyo	180,423	28
Klamath	146,573	28
Lake Tahoe Basin	22,796	13
Lassen	26,474	11
Los Padres	39,347	17
Mendocino	35,159	15
Modoc	18,918	6
Plumas	29,343	9
San Bernardino	28,269	17
Sequoia	61,984	21
Shasta-Trinity	288,724	52
Sierra	159,338	31
Siskiyou	1,997	1
Six Rivers	126,875	30
Stanislaus	56,745	23
Tahoe	39,581	7
Total	1,377,358	354

Total acreage (sum of AEF) is 1,667,951. This is the acreage represented by all plots in this session.
Possible Units: Volume in cubic feet, Biomass in pounds, Area in acres

18. Select **View Map \ Forest Service Map**. A map with lands administered by the USDA Forest Service appears.
19. Select **Equal Interval Classes** with the default of 5 classes (see example below). Apply the tools in the map form.

    A. Click (**Add Map Layer Tool**). The Add Map Layers dialog displays. Choose **Shapefile**. Select **Add Layer** to use the **Open** dialog and locate statesp020 in the RPA Data Wiz application directory. Close the **Add Map Layers** dialog by clicking the upper-right "X" button on the dialog. The map display shows a state boundary layer.

    B. Change the color of the state boundary layer. Double-click on the name, statesp020, in the legend. A color dialog appears. Click on the desired color and select **OK**.

    C. Click (**Zoom Out Tool**). Click the left button on the mouse over the point of interest to decrease the map scale by a factor of two.

    D. Click (**Zoom to Full Extent Tool**). The map extent changes to show all the geographic units of every map layer present.

    E. Click (**Zoom In Tool**). Hold the left button on the mouse and drag the cursor over the California area. Release the mouse button and the map display reflects the new area in a larger map scale (smaller map area displayed in same computer screen area).

F. Click (**Pan Tool**). Hold down the left button on the mouse and move the mouse from one point to another to change the map extent.

G. Place the cursor over a polygon of interest, hold **SHIFT** and click the left button on the mouse. The value associated with the polygon displays. There may be more than one polygon associated with a U.S. National Forest (collectively they are called a geographic unit). If this is the case, then each polygon will have the same value. Notice the cursor and value displayed in the example below.

H. Click **Polygon Labels** to display the names of the geographic units.

I. Adjust the size (points) of the polygon labels by changing the number for **Label Size** and pressing **Polygon Labels** again.

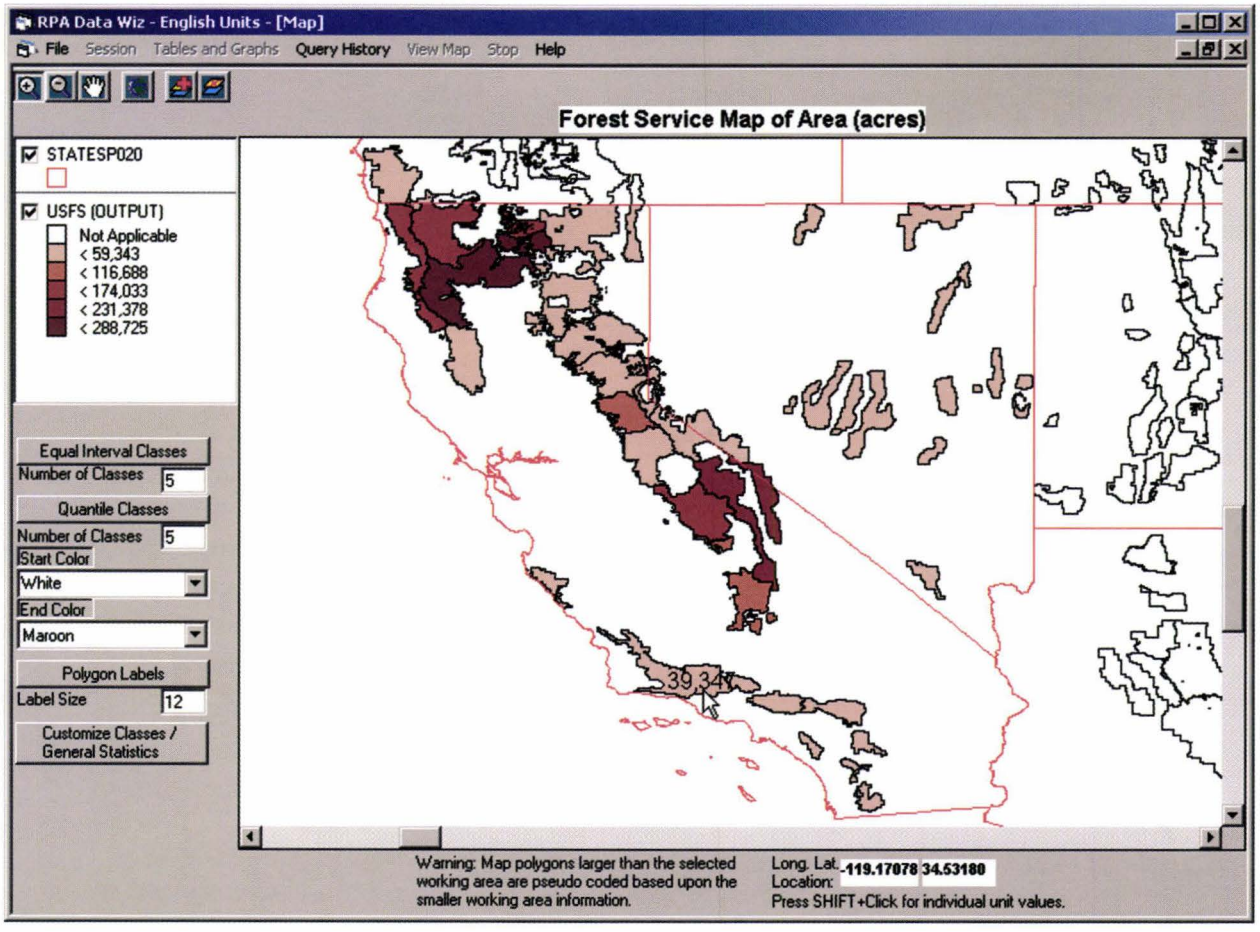
J. Make the state boundary layer invisible by clicking the check box next to the associated name in the legend and clicking **Equal Interval Classes**.

K. Click the check box next to the name again. Click **Equal Interval Classes** again to redisplay the state boundary layer.

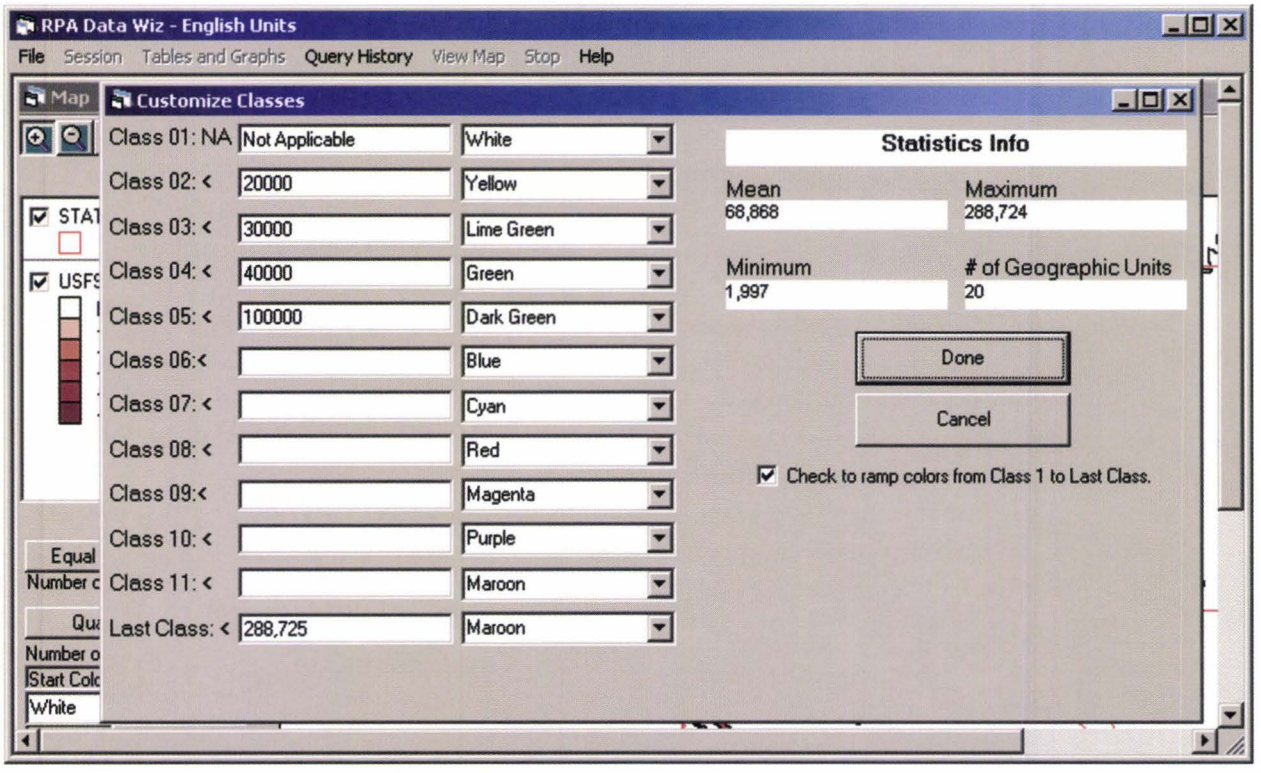
L. Change the order that the map layers are displayed in the map extent. Click and hold on **statesp020** in the legend. Drag the layer name to the bottom of the legend area and release the mouse button. The state boundary layer will be displayed underneath USDA Forest Service layer.

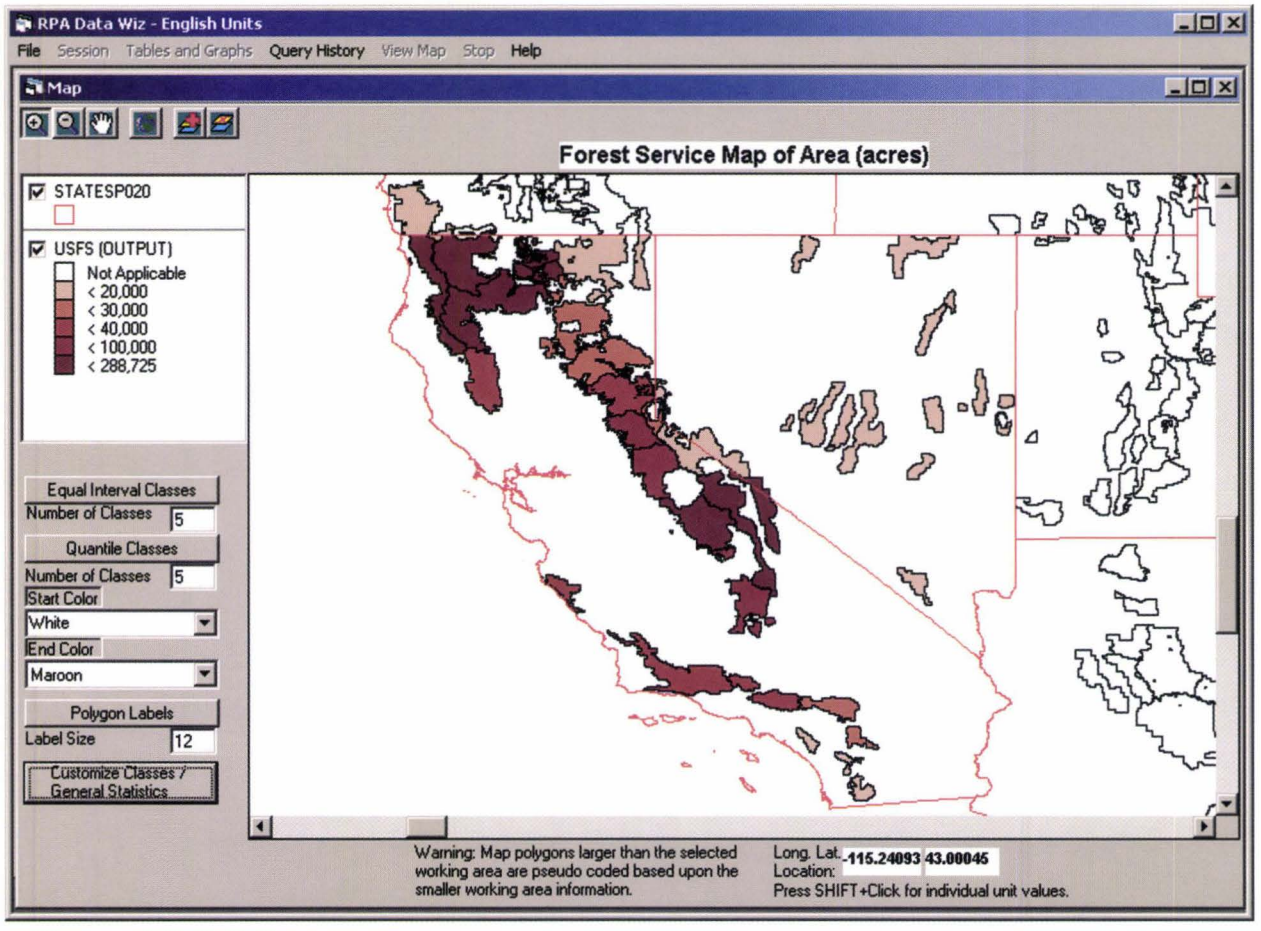
M. Remove the state boundary layer. First, click on **statesp020** in the legend. Next click (**Delete Map Layer Tool**) to remove the map layer from the map form.

N. Add the state boundary layer back in the map form for a frame of reference (see "A" above).



20. Select **Quantile Classes** with the default of 5 classes. Notice the difference. The map and legend indicate that most of the national forests have relatively low amounts of area in older, large-diameter forest stands. Looking back at the table also verifies this.
21. Choose **Customize Classes / General Statistics** (see examples below). Look at the Statistics Info section.
    A. Type in numbers for class breaks that you would like to see.
    B. Check **Check to ramp colors from Class 1 to Last Class**.
    C. Click on the Last Class color box and change the color to Maroon.
    D. Select **Done**. Move or close the Customize Classes dialog so you can see the map.


RPA Data Wiz - English Units
File Session Tables and Graphs Query History View Map Stop Help
Map
Customize Classes
Class 01: NA Not Applicable White
Class 02: < 20000 Yellow
Class 03: < 30000 Lime Green
Class 04: < 40000 Green
Class 05: < 100000 Dark Green
Class 06:< Blue
Class 07: < Cyan
Class 08: < Red
Class 09:< Magenta
Class 10: < Purple
Class 11: < Maroon
Last Class: < 288,725 Maroon
Statistics Info
Mean 68,868
Maximum 288,724
Minimum 1,997
# of Geographic Units 20
Done
Cancel
Check to ramp colors from Class 1 to Last Class.


RPA Data Wiz - English Units
File Session Tables and Graphs Query History View Map Stop Help
Map
Forest Service Map of Area (acres)
STATESP020
USFS (OUTPUT)
Not Applicable
< 20,000
< 30,000
< 40,000
< 100,000
< 288,725
Equal Interval Classes
Number of Classes 5
Quantile Classes
Number of Classes 5
Start Color
White
End Color
Maroon
Polygon Labels
Label Size 12
Customize Classes / General Statistics
Warning: Map polygons larger than the selected working area are pseudo coded based upon the smaller working area information.
Long. Lat. -115.24093 43.00045
Location:
Press SHIFT+Click for individual unit values.

22. Choose **File** in the main RPA Data Wiz menu. Notice the options to output the map and the legend. The legend is output separately from the map. No title is output with the map.
    A. Select **File \ Copy Map to Clipboard** to display the **Save – Copy** dialog.
    B. Select **Copy as Bitmap**.
    C. Click **Copy Map to Clipboard** to copy the map portion of the Map form to the Windows clipboard.
    D. Close the **Save - Copy** dialog by clicking the upper-right "X" button on the dialog.
    E. Paste the map into another software program. In Microsoft PowerPoint, choose **Edit \ Paste Special...** and select **Device Independent Bitmap**. You may need to change the size of the image in your other software program. Remember to change the map equally in the east-west and north-south directions.
    F. Choose **File \ Copy Legend to Clipboard** to automatically copy the legend to the clipboard. The legend only copies in the bitmap format.
    G. Paste the legend into another software program. In PowerPoint, choose **Edit \ Paste Special...** and select **Device Independent Bitmap**.
23. Close the **Map** and **Output Table** forms.

Exercise 3: Ratios

This exercise shows how RPA Data Wiz can be applied to answer several typical questions dealing with ratios. Even though the tables answer many questions directly, additional questions can be answered with a little manipulation.

Ratio of Mortality to Netgrowth on Forest Land in Baileys' Ecosections

1. If RPA Data Wiz is not already running, then start it. Typical way is to select **Start \ Programs \ RPA Data Wiz**.
2. Click in the gray area of the initial screen to start.
3. If you have the English and metric versions, then pick one of them.
4. Choose **Session \ New Session**.
5. Select **Pacific Northwest Assessment Subregion** in Select RPA Subregion(s).
6. Click **Done Selecting RPA Subregion(s)**.
7. Choose **Land Cover Class** in RPA Variable Selection.
8. Select **Forest Land** in Select Field Value(s).
9. Click **Done Selecting Field Value(s)**.
10. Click **Done Selecting** in RPA Variable Selection.
11. Create a table of mortality to netgrowth volume for Baileys' Ecosections.
    A. Choose **Tables and Graphs \ Multiple Variable Tables and Graphs**. The Multiple Variable Sums Table and Graph Generator dialog appears.
    B. Select **Baileys' Ecosection** for the grouping variable.
    C. Select **Mortality** for the sum variable.
    D. Select **Netgrowth** as the optional ratio variable (under "Optional, only for Ratio of Sums:").
    E. Check **Add number of samples as extra column**.
    F. Choose **Create Summary Table** (see example below).

RPA Data Wiz - English Units

File Session Tables and Graphs Query History View Map Stop Help

Output Table

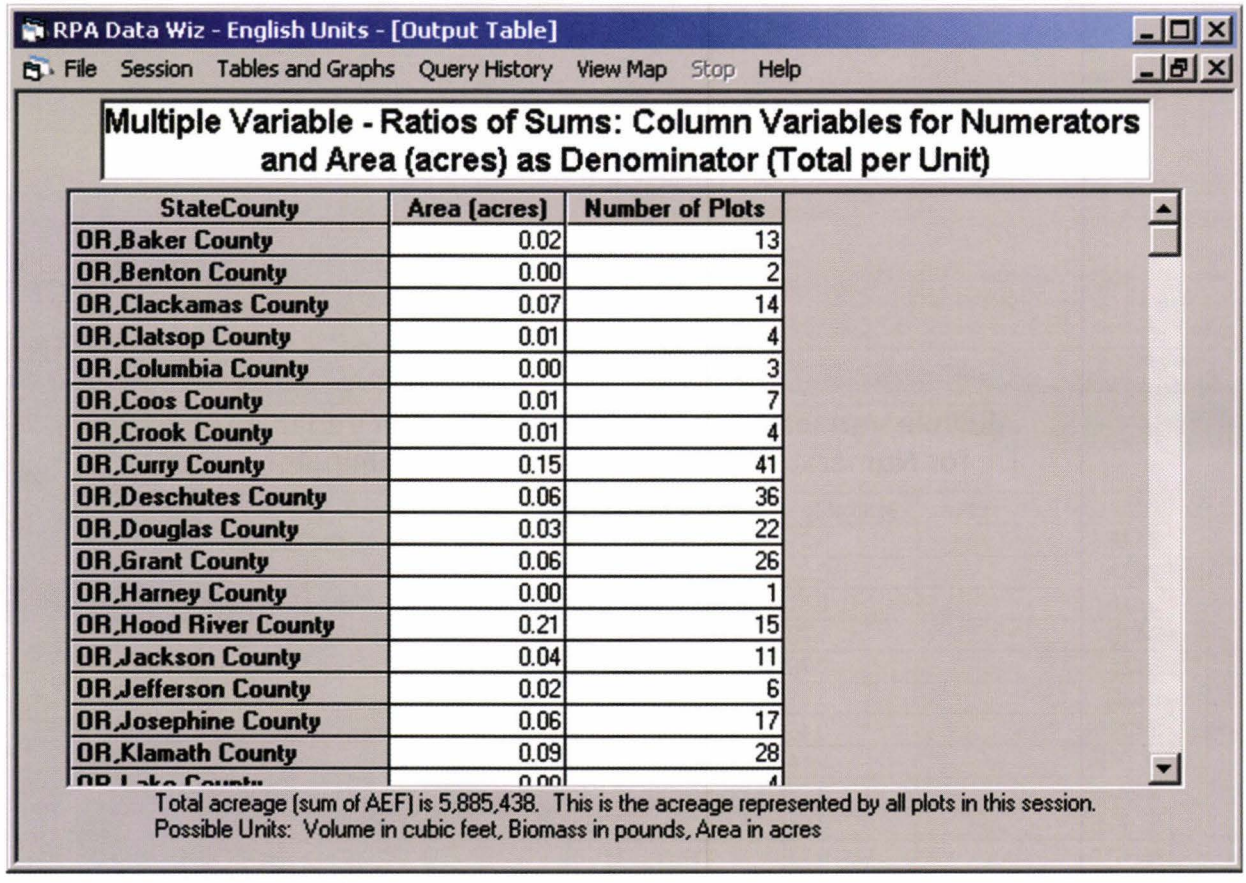
Multiple Variable - Ratios of Sums: Column Variables for Numerators and Netgrowth as Denominator

Baileys' Ecosection	Mortality	Number of Plots
242A	0.23	1,359
263A	0.02	3
331A	0.31	12
342B	1.70	157
342C	0.79	81
342H	3.41	339
342I	0.46	73
M242A	0.14	1,881
M242B	0.28	2,122
M242C	0.64	2,757
M261A	0.16	1,028
M261D	0.23	199
M261G	1.43	217
M332G	0.94	2,329
M333A	0.41	585
Total	0.29	13,142

Total acreage (sum of AEF) is 51,440,729. This is the acreage represented by all plots in this session.
Possible Units: Volume in cubic feet, Biomass in pounds, Area in acres

Ratio of Productive Reserved Forest Land to All Land by County

1. Choose **Session \ Select from Existing Selection**.
2. Choose **Forested Land Code** in RPA Variable Selection.
3. Select **Productive Reserved Forest Land** in Select Field Value(s).
4. Click **Done Selecting Field Value(s)**.
5. Click **Done Selecting** in RPA Variable Selection.
6. Create a table of productive reserved forest land to all land by county.
   A. Choose **Tables and Graphs \ Multiple Variable Tables and Graphs**. The Multiple Variable Sums Table and Graph Generator dialog appears.
   B. Select **StateCounty** for the grouping variable.
   C. Select **Area** for the sum variable.
   D. Select **Area** as the optional ratio variable.
   E. Check **Add number of samples as extra column**.
   F. Check **Mapping Ratios: Divide by total sum associated with each geographic unit**.
7. Choose **Create Summary Table** (see example below). This may take a few minutes if you have a slower computer.


RPA Data Wiz - English Units - [Output Table]

File Session Tables and Graphs Query History View Map Stop Help

Multiple Variable - Ratios of Sums: Column Variables for Numerators and Area (acres) as Denominator (Total per Unit)

StateCounty	Area (acres)	Number of Plots
OR,Baker County	0.02	13
OR,Benton County	0.00	2
OR,Clackamas County	0.07	14
OR,Clatsop County	0.01	4
OR,Columbia County	0.00	3
OR,Coos County	0.01	7
OR,Crook County	0.01	4
OR,Curry County	0.15	41
OR,Deschutes County	0.06	36
OR,Douglas County	0.03	22
OR,Grant County	0.06	26
OR,Harney County	0.00	1
OR,Hood River County	0.21	15
OR,Jackson County	0.04	11
OR,Jefferson County	0.02	6
OR,Josephine County	0.06	17
OR,Klamath County	0.09	28
OR,Lake County	0.00	4

Total acreage (sum of AEF) is 5,885,438. This is the acreage represented by all plots in this session.
Possible Units: Volume in cubic feet, Biomass in pounds, Area in acres

Ratio of National Forest Timberland to Private Timberland by 108th Congressional District

1. Choose **Session \ New Session**.
2. Select **Pacific Northwest Assessment Subregion** in Select RPA Subregion(s).
3. Click **Done Selecting RPA Subregion(s)**.
4. Choose **Forested Land Code** in RPA Variable Selection.
5. Select timberland. In Select Field Value(s), choose **Productive Non-reserved Forest Land (Timberland)**.
6. Click **Done Selecting Field Value(s)**.
7. Click **Done Selecting** in RPA Variable Selection.
8. Create a crosstab table of 108th Congressional District by ownership group.
   A. Choose **Tables and Graphs \ Crosstab Tables and Graphs**.
   B. Select **108th Congressional District Code** for the grouping variable.
   C. Select **Owner Group** for the pivot variable and **Area** for the sum variable.
9. Choose **Create Summary Table** (see example below). Note that this is not the final table with the ratios of national forest timberland to private timberland by 108th Congressional District. RPA Data Wiz cannot directly provide this information. With a few steps, you can derive the information by using this table in a spreadsheet like Microsoft Excel.

RPA Data Wiz - English Units - [Output Table]

File Session Tables and Graphs Query History View Map Stop Help

Crosstab of Area (acres): Row Variables by Owner Group

108th Congressional District Code	National Forest	Other Public	Private	Total
4101	27,301	249,044	869,769	1,146,114
4102	7,861,500	640,387	3,281,847	11,783,734
4103	158,419	14,232	197,240	369,891
4104	3,193,326	1,674,305	3,311,798	8,179,429
4105	737,364	569,307	1,045,405	2,352,076
5301	0	32,082	96,499	128,581
5302	830,803	365,929	879,385	2,076,117
5303	963,693	497,547	2,158,616	3,619,856
5304	1,253,773	261,135	1,011,725	2,526,633
5305	2,181,106	509,975	2,257,211	4,948,292
5306	520,942	548,509	1,755,091	2,824,542
5307	1,855	0	16,640	18,495
5308	180,880	169,334	690,499	1,040,713
5309	0	61,847	101,995	163,842
Total	17,910,962	5,593,633	17,673,720	41,178,315

Total acreage (sum of AEF) is 41,178,315. This is the acreage represented by all plots in this session.
Possible Units: Volume in cubic feet, Biomass in pounds, Area in acres

10. Work with the table in a spreadsheet to derive the ratio. If you have Excel, output the table in Excel format.
    A. Choose **File \ Save As Excel Table**. Save the file.
    B. Start Excel and choose **File \ Open**. Choose the file you just saved in RPA Data Wiz.
    C. Create a new column with the ratio of national forest timberland to private timberland.
        1. In a non-occupied column, select a cell in the second row (the first row under the column headings).
        2. In the cell, type the formula that will divide the column of national forest ownership by the column of private ownership (e.g., "= B2/D2").
        3. Press **ENTER**.
        4. Now select the cell again. Copy the cell (select **Edit \ Copy**).
        5. Select the rest of the cells in the current column that are associated with a congressional district (including the total) and paste the formula in these cells (select **Edit \ Paste**). The resulting numbers are the ratios of national forest timberland to private timberland by 108th Congressional District (see example below). You can express these numbers as percentages by adjusting the formula (e.g., "= (B2/D2) * 100").

108th Congressional District Code	National Forest	Other public	Private	Total	National Forest timberland to private timberland
4101	27,301	249,044	869,769	1,146,114	0.031388794
4102	7,861,500	640,387	3,281,847	11,783,734	2.395449879
4103	158,419	14,232	197,240	369,891	0.803178868
4104	3,193,326	1,674,305	3,311,798	8,179,429	0.964227287
4105	737,364	569,307	1,045,405	2,352,076	0.705338123
5301	0	32,082	96,499	128,581	0
5302	830,803	365,929	879,385	2,076,117	0.944754573
5303	963,693	497,547	2,158,616	3,619,856	0.446440219
5304	1,253,773	261,135	1,011,725	2,526,633	1.239242877
5305	2,181,106	509,975	2,257,211	4,948,292	0.966283613
5306	520,942	548,509	1,755,091	2,824,542	0.296817658
5307	1,855	0	16,640	18,495	0.111478365
5308	180,880	169,334	690,499	1,040,713	0.261955484
5309	0	61,847	101,995	163,842	0
Total	17,910,962	5,593,633	17,673,720	41,178,315	1.013423433

Exercise 4: Wildlife Habitat Identification

In this exercise you will identify counties that have critical habitat for animals. Birds and mammals use dead trees like snags for shelter. The pileated and red-headed woodpeckers favor larger snags (> 20-inch or > 50-cm size classes). Medium snags (10- to 20-inch or 25- to 50-cm size classes) are used by squirrels and the American kestrel. Birds like the eastern bluebird and black-capped chickadee prefer smaller snags (6- to 10-inch or 15- to 25-cm size classes). In addition, many animals opt to live in particular forest types at specific ages. For example, gray squirrels prefer hardwood stands like oak that are mature enough to provide shelter and food. This exercise will help identify some counties that may have higher preference for some species based upon the dead wood present. You will use Salvable Dead Biomass 6" Class or Larger (salvable dead biomass 15-cm class or larger in metric version) to indicate the amount of shelter available.

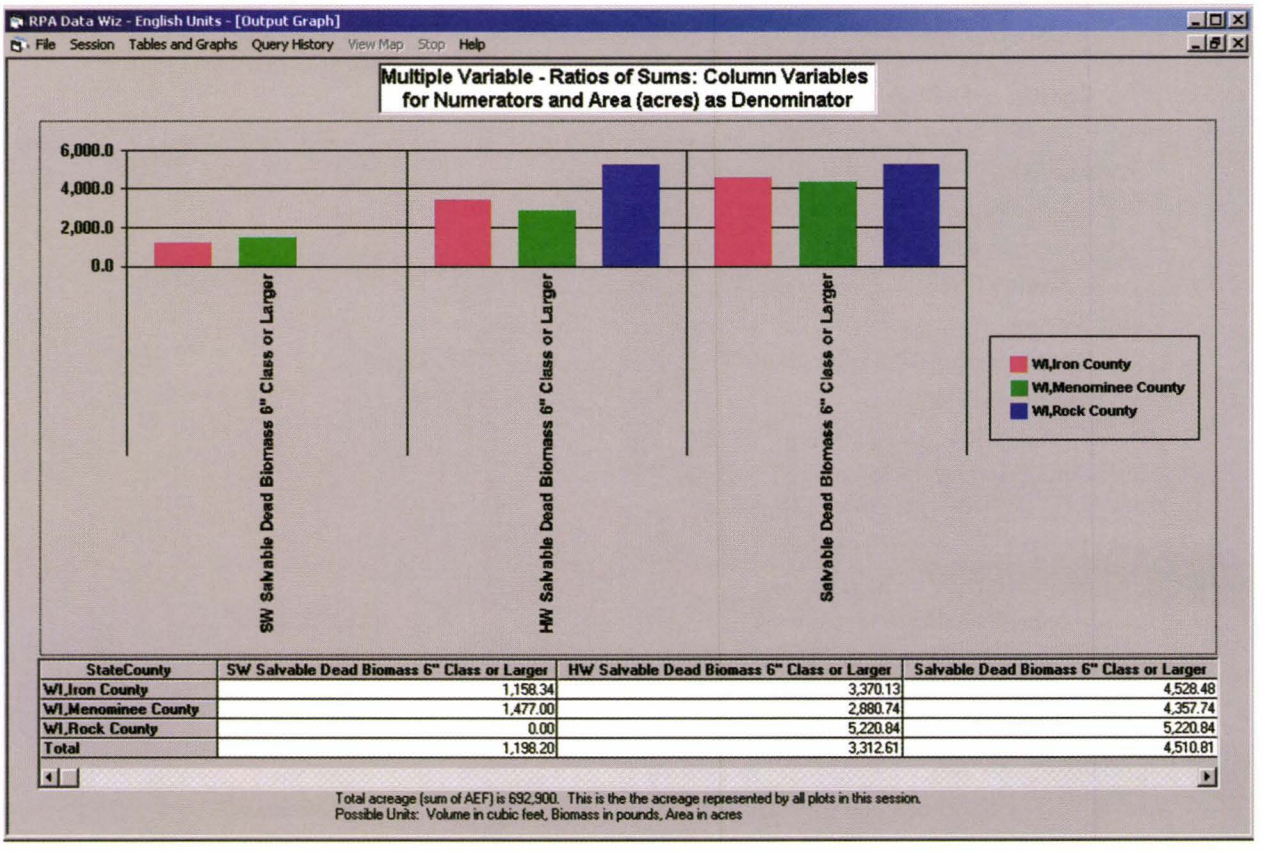
Tables and Graphs - Salvable Dead Biomass 6" Class or Larger

1. If RPA Data Wiz is not already running, then start it. Typical way is to select **Start \ Programs \ RPA Data Wiz**.
2. Click in the gray area of the initial screen to start.
3. If you have the English and metric versions, then pick one of them.
4. Choose **Session \ New Session**.
5. Select **North Central Assessment Subregion** in Select RPA Subregion(s).
6. Click **Done Selecting RPA Subregion(s)**.
7. Select **State** in RPA Variable Selection.
8. Choose **WI** in Select Field Value(s).
9. Click **Done Selecting Field Value(s)**.
10. Choose **Land Cover Class** in RPA Variable Selection.
11. Select **Forest Land** in Select Field Value(s).
12. Click **Done Selecting Field Value(s)**.
13. Choose **Done Selecting** in RPA Variable Selection.
14. Create a table with biomass per area estimates for each county.
    A. Choose **Tables and Graphs \ Multiple Variable Tables and Graphs**. The Multiple Variable Sums Table and Graph Generator dialog appears.
    B. Select **StateCounty** for the grouping variable.
    C. Select **SW Salvable Dead Biomass 6" Class or Larger**, **HW Salvable Dead Biomass 6" Class or Larger**, and **Salvable Dead Biomass 6" Class or Larger** for the sum variables (15 cm class or larger for metric version). Use CTRL or SHIFT when selecting.
    D. Select **Area** as the optional ratio variable (under "Optional, only for Ratio of Sums:").
    E. Choose **Create Summary Table**. Notice that Iron, Menominee, and Rock Counties have the highest salvable dead biomass per area and that most of this is hardwood (HW).
15. Create a new session focusing on Iron, Menominee, and Rock Counties.
    A. Choose **Session \ Select from Existing Selection**.
    B. Choose **StateCounty** in RPA Variable Selection.
    C. Select **WI**, **Iron**; **WI**, **Menominee**; and **WI**, **Rock** from Select Field Value(s) using CTRL + Click.
    D. Click **Done Selecting Field Value(s)**.
    E. Select **Done Selecting** in RPA Variable Selection.
16. Choose **Query History** to see the queries you have performed so far.
17. Close the **Query History** form.
18. Create histograms comparing the amount of SW and HW salvable dead biomass in 6 inch or larger classes among the three counties.
    A. Choose **Tables and Graphs \ Multiple Variable Tables and Graphs**.
    B. Select **StateCounty** for the grouping variable.

C. Select **SW Salvable Dead Biomass 6" Class or Larger**, **HW Salvable Dead Biomass 6" Class or Larger**, and **Salvable Dead Biomass 6" Class or Larger** (15 cm class or larger for metric version) for the sum variables.

D. Select **Area** for the optional ratio variable.

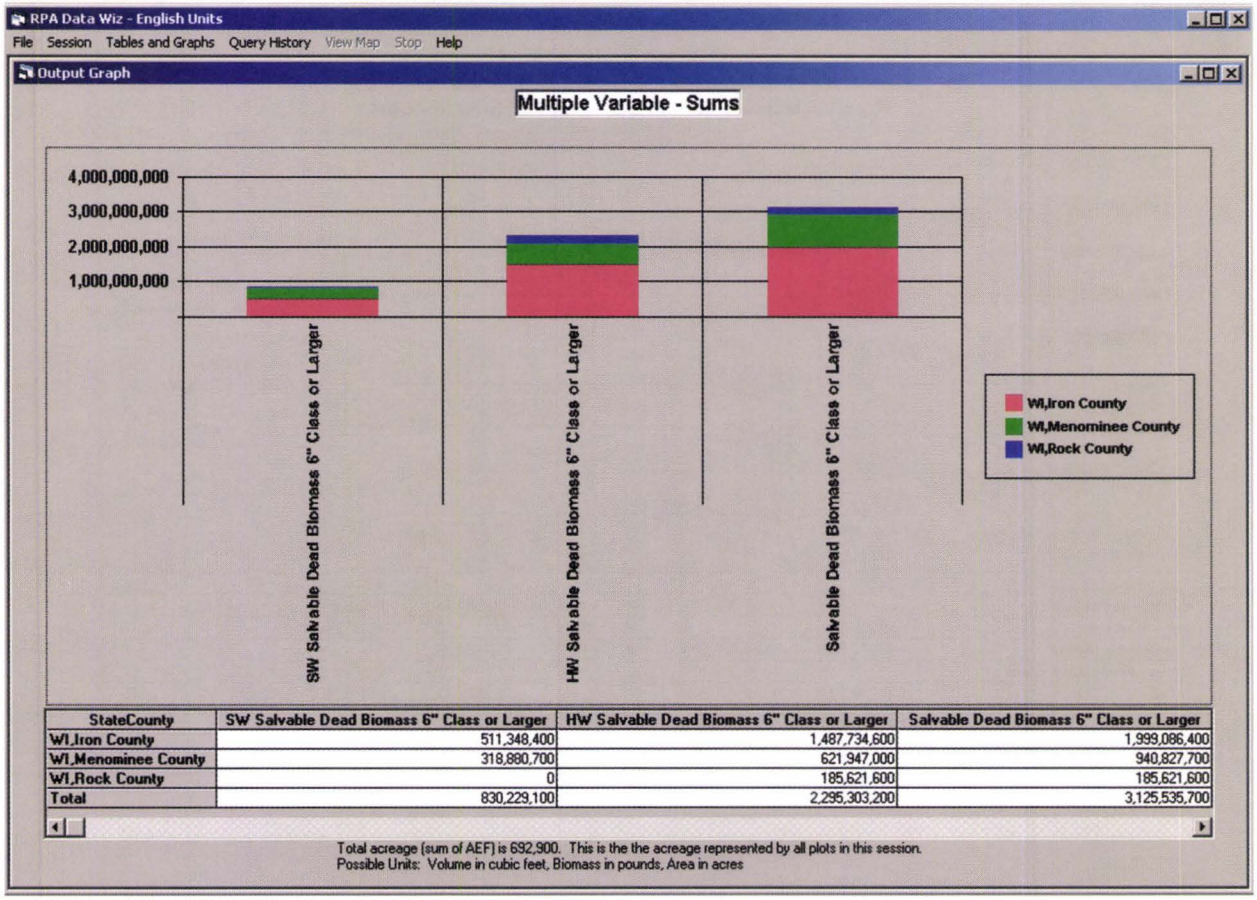
E. Choose **Create Graph** (see example below). Make sure your form sizes are maximized to see the graph well (click on box in upper right-hand corner of each form to maximize size). Look especially at the salvable dead biomass section of the graph (SW and HW combined). There is not much difference among the counties on a per area basis.


RPA Data Wiz - English Units - [Output Graph]
File Session Tables and Graphs Query History View Map Stop Help
Multiple Variable - Ratios of Sums: Column Variables for Numerators and Area (acres) as Denominator
6,000.0
4,000.0
2,000.0
0.0
SW Salvable Dead Biomass 6" Class or Larger
HW Salvable Dead Biomass 6" Class or Larger
Salvable Dead Biomass 6" Class or Larger
WI,Iron County
WI,Menominee County
WI,Rock County

StateCounty	SW Salvable Dead Biomass 6" Class or Larger	HW Salvable Dead Biomass 6" Class or Larger	Salvable Dead Biomass 6" Class or Larger
WI,Iron County	1,158.34	3,370.13	4,528.48
WI,Menominee County	1,477.00	2,880.74	4,357.74
WI,Rock County	0.00	5,220.84	5,220.84
Total	1,198.20	3,312.61	4,510.81

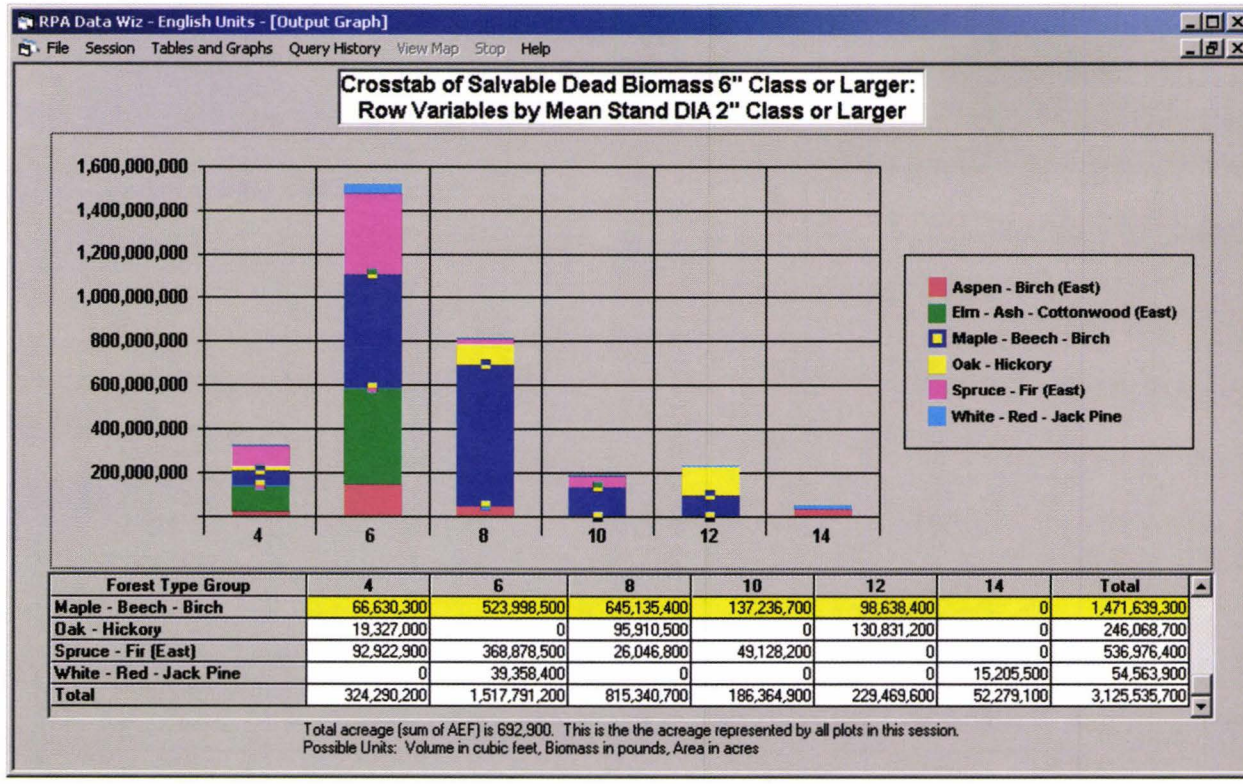
Total acreage (sum of AEF) is 692,900. This is the the acreage represented by all plots in this session.
Possible Units: Volume in cubic feet, Biomass in pounds, Area in acres

F. Choose **Tables and Graphs \ Multiple Variable Tables and Graphs** again. Make the same histogram except do not choose an optional ratio variable. This shows the total dead biomass sums for each county. This is a cumulative histogram unlike the previous histogram. The graph and table show a great difference in totals among the counties with Iron County having more than the other two counties combined. Note that Iron County is much larger. Iron County definitely has the most salvable dead biomass in the 6-inch or larger class


RPA Data Wiz - English Units
File Session Tables and Graphs Query History View Map Stop Help
Output Graph
Multiple Variable - Sums
4,000,000,000
3,000,000,000
2,000,000,000
1,000,000,000
SW Salvable Dead Biomass 6" Class or Larger
HW Salvable Dead Biomass 6" Class or Larger
Salvable Dead Biomass 6" Class or Larger
WI,Iron County
WI,Menominee County
WI,Rock County
Total acreage (sum of AEF) is 692,900. This is the the acreage represented by all plots in this session.
Possible Units: Volume in cubic feet, Biomass in pounds, Area in acres

StateCounty	SW Salvable Dead Biomass 6" Class or Larger	HW Salvable Dead Biomass 6" Class or Larger	Salvable Dead Biomass 6" Class or Larger
WI,Iron County	511,348,400	1,487,734,600	1,999,086,400
WI,Menominee County	318,880,700	621,947,000	940,827,700
WI,Rock County	0	185,621,600	185,621,600
Total	830,229,100	2,295,303,200	3,125,535,700

19. Look at the salvable dead biomass in the available forest types and age classes by stand diameter class for each of the three counties.
    A. Choose **Tables and Graphs \ Crosstab Tables and Graphs**.
    B. Select **StateCounty**, **Forest Type Group**, and **Ageclass** for the grouping variables.
    C. Select **Mean Stand DIA 2" Class or Larger** (5-cm class or larger for metric version) for the pivot variable.
    D. Select **Salvable Dead Biomass 6" Class or Larger** (15-cm class or larger for metric version) for the sum variable.
    E. Click **Create Summary Table**. Look at the **Total** row on the bottom. Notice that most of the salvable dead biomass is present in the smaller stand-size classes (8-inch or 20-cm mean stand-size class and smaller). There is no salvable dead biomass listed for forest stands larger than the 14-inch mean stand-size class (35-cm mean stand-size class). Look at the **Total** column on the right. You can quickly scan the relative amounts of salvable dead biomass for each county-forest type-age class combination. Depending upon the animal species in question, one county can hold more promise than the others.
20. Compare the amount of salvable dead biomass among forest types.
    A. Choose **Tables and Graphs \ Crosstab Tables and Graphs**.
    B. Select **Forest Type Group** as the grouping variable.
    C. Select **Mean Stand DIA 2" Class or Larger** (5-cm class or larger for metric version) for the pivot variable.
    D. Select **Salvable Dead Biomass 6" Class or Larger** (15-cm class or larger for metric version) for the sum variable.
    E. Click **Create Graph** (see example next page). The histogram shows Maple-Beech-Birch with the most salvable dead biomass.


RPA Data Wiz - English Units - [Output Graph]
File Session Tables and Graphs Query History View Map Stop Help
Crosstab of Salvable Dead Biomass 6" Class or Larger:
Row Variables by Mean Stand DIA 2" Class or Larger
1,600,000,000
1,400,000,000
1,200,000,000
1,000,000,000
800,000,000
600,000,000
400,000,000
200,000,000
4
6
8
10
12
14
Aspen - Birch (East)
Elm - Ash - Cottonwood (East)
Maple - Beech - Birch
Oak - Hickory
Spruce - Fir (East)
White - Red - Jack Pine
Total acreage (sum of AEF) is 692,900. This is the the acreage represented by all plots in this session.
Possible Units: Volume in cubic feet, Biomass in pounds, Area in acres

Forest Type Group	4	6	8	10	12	14	Total
Maple - Beech - Birch	66,630,300	523,998,500	645,135,400	137,236,700	98,638,400	0	1,471,639,300
Oak - Hickory	19,327,000	0	95,910,500	0	130,831,200	0	246,068,700
Spruce - Fir (East)	92,922,900	368,878,500	26,046,800	49,128,200	0	0	536,976,400
White - Red - Jack Pine	0	39,358,400	0	0	0	15,205,500	54,563,900
Total	324,290,200	1,517,791,200	815,340,700	186,364,900	229,469,600	52,279,100	3,125,535,700

F. Use **SHIFT** + click to select the **Maple-Beech-Birch** series on the graph. A new histogram showing only the Maple-Beech-Birch series appears and the Maple-Beech-Birch series is highlighted in the table. This forest type comprises approximately half of the total salvable biomass for the three counties.

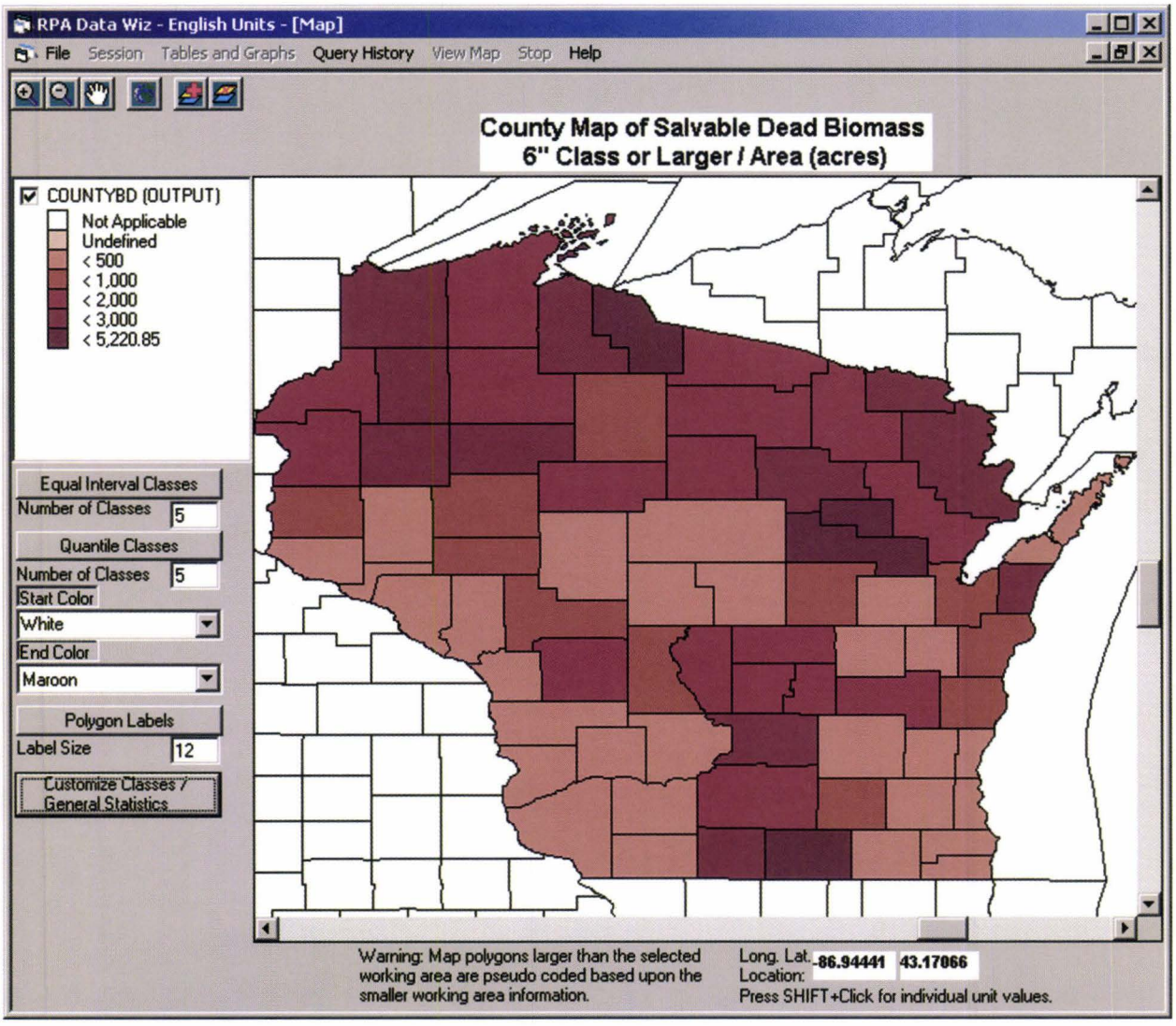
G. Click outside the present histogram to return to the original graph. The graph clearly shows that most of the salvable dead biomass is in the 6-inch mean stand-size class (15-cm mean stand-size class).

21. Assuming salvable dead biomass in the 6-inch or larger classes signifies dead snags, this analysis highlights several counties in Wisconsin that may have favorable habitat for animal species preferring smaller forest stand sizes in the Maple-Beech-Birch forest type.

Map - Salvable Dead Biomass 6" Class or Larger

1. Create a table of salvable dead biomass per area for each county.
   A. Choose **Tables and Graphs \ Multiple Variable Tables and Graphs**
   B. Select **StateCounty** for the grouping variable.
   C. Select **Salvable Dead Biomass 6" Class or Larger** (15-cm class or larger for metric version) for the sum variable.
   D. Select **Area** for the optional ratio variable.
   E. Select **Create Summary Table**.
2. Identify the natural groupings or groupings of interest for the biomass per area estimates associated with the counties. Output the table to read into a spreadsheet and sort the biomass per area estimates. If you have Microsoft Excel, output the table in Excel format.
   A. Choose **File \ Save As Excel Table** and save the file.
   B. Open the file in Excel.
   C. Delete the first (row headings) and last (totals) rows. Select the last row and choose **Edit \ Delete**. Select the first row and choose **Edit \ Delete**.
   D. Select both columns of numbers and choose **Data \ Sort**. Sort by column B, the salvable dead biomass per area column. Look at the sorted biomass numbers. Look for natural or interesting groupings and breaks in the sorted numbers. Identify 5 or more breaks that you think delineate the groups. Remember these break numbers for later.

3. Select **View Map \ County Map**. A county map appears.
4. Select **Equal Interval Classes** with the default of 5 classes.
5. Select **Quantile Classes** with the default of 5 classes. Notice the difference. The map and legend indicate that most counties have relatively low amounts of salvable dead biomass per area in the 6-inch and larger classes.
6. Choose **Customize Classes / General Statistics**. Look at the **Statistics Info** section.
   A. Type in numbers for the class breaks you previously identified.
   B. Check **Check to ramp colors from Class 1 to Last Class**.
   C. Click on the **Last Class** color box and change the color to Maroon.
   D. Select **Done** but leave the Customize Classes dialog open. Move the dialog so you can see the map.
   E. Compare your custom map to the equal interval and quantile class maps by selecting the **Equal Interval Classes** and **Quantile Classes** buttons. Experiment with the number of classes designated with each type of map. Which is the best map? The answer to this can vary depending upon your objective. You may want a map that does the best job of identifying the differences in salvable dead biomass per area among all the counties. In this case, you will need a number of classes (e.g., 5 or more) preferably occurring close to any natural breaks. In contrast, you may only wish to highlight the few counties with the highest salvable dead biomass per area. With this objective in mind, a few classes would suffice. Below is an example where the class intervals were set manually using the Customize Classes dialog.
7. Close the Map and Output Table forms.
8. Choose **File \ Exit** to stop the program.



Chapter 7
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Appendix A
Selection Variables

These are the definitions for the selection variables in RPA Data Wiz. The corresponding field names in the RPA Data Wiz databases (English, rpadb2002.mdb; metric, rpadb2002met.mdb) are also provided. RPA Data Wiz uses Microsoft Access databases. Most of the data in RPA Data Wiz (rpadb2002.mdb and rpadb2002met.mdb, Access databases) originally came from the 2002 RPA Assessment database, an Oracle database. Most of the definitions presented here come directly from *The 2002 RPA Plot Summary Database Users Manual Version 1.0* (Miles and Vissage, In prep.) associated with the 2002 RPA Assessment database. Some fields have been added and some field definitions have been modified to work in RPA Data Wiz. The field definitions that may be unique to RPA Data Wiz or may have been changed to work in RPA Data Wiz are marked with an asterisk. The definitions follow the order presented in the RPA Variable Selection dialog of RPA Data Wiz. D.b.h. (diameter at breast height) is mentioned in this appendix. It is defined as the stem diameter, outside bark, at a point 4.5 feet (137.16 cm) above ground. Any other variables mentioned but not defined in this appendix are defined by Miles and Vissage (In prep.).

RPA Data Wiz Name **Access FIELD NAME**	**Definition**
1. Year YEAR	RPA year. This is set to 2002 for all records in the 2002 RPA plot summary database.
2. Region or Station ID # RSID	Region or station identification number. This coded value uniquely identifies each of the 16 locations contributing data to the RPA Database. Code — Region or Station 1 — Region 1 2 — Region 2 3 — Region 3 4 — Region 4 5 — Region 5 6 — Region 6 7 — Bureau of Land Management (Oregon) 8 — Region 8 9 — Region 9 10 — Region 10 22 — Rocky Mountain Research Station 23 — North Central Research Station 24 — Northeastern Research Station 26 — Pacific Northwest Research Station 27 — Alaska – PNW Research Station 33 — Southern Research Station

RPA Data Wiz Name Access FIELD NAME	Definition

3. Source of Inventory Data
INVSOURCE

Source of the inventory data. A coded value identifying the source of the data on the record. Sources include variations of original inventory data and inventory data updated by bookkeeping or projection. Code 1 is used for all State inventories except for parts of Alaska and Hawaii.

Code	Source
1	PLOT LEVEL - Original Eastwide/Westwide or FIADB format
2	PLOT LEVEL - Updated Eastwide/Westwide standard format
3	PLOT LEVEL - Original inventory data
4	PLOT LEVEL - Updated inventory data
5	STAND LEVEL - Original inventory data
6	STAND LEVEL - Updated inventory data
7	STRATUM LEVEL - Original inventory data
8	STRATUM LEVEL - Updated inventory data

4. Source Date
SRCDATE

Source date. The year of the field inventory for the plot.

5. State
STATE

State FIPS code. The State in which the plot is located.

Code	Abbreviation	Name
01	AL	Alabama
02	AK	Alaska
04	AZ	Arizona
05	AR	Arkansas
06	CA	California
08	CO	Colorado
09	CT	Connecticut
10	DE	Delaware
11	DC	District of Columbia
12	FL	Florida
13	GA	Georgia
15	HI	Hawaii
16	ID	Idaho
17	IL	Illinois
18	IN	Indiana
19	IA	Iowa
20	KS	Kansas
21	KY	Kentucky
22	LA	Louisiana
23	ME	Maine
24	MD	Maryland
25	MA	Massachusetts
26	MI	Michigan
27	MN	Minnesota
28	MS	Mississippi
29	MO	Missouri
30	MT	Montana
31	NE	Nebraska
32	NV	Nevada
33	NH	New Hampshire

34	NJ	New Jersey
35	NM	New Mexico
36	NY	New York
37	NC	North Carolina
38	ND	North Dakota
39	OH	Ohio
40	OK	Oklahoma
41	OR	Oregon
42	PA	Pennsylvania
44	RI	Rhode Island
45	SC	South Carolina
46	SD	South Dakota
47	TN	Tennessee
48	TX	Texas
49	UT	Utah
50	VT	Vermont
51	VA	Virginia
53	WA	Washington
54	WV	West Virginia
55	WI	Wisconsin
56	WY	Wyoming
72	PR	Puerto Rico - Not in 2002 Database

6. *StateCounty
STATE and COUNTY

A combined State-county FIPS code ((STATE * 1000) + COUNTY). This field provides a unique identifier for each county in the country. FIPS codes for States are unique, but FIPS codes for counties are not unique among States. Consequently, StateCounty was created. Some special codes represent areas other than counties.

Code	StateCounty	Code	StateCounty
0	Unknown	29211	MO,Sullivan County
1001	AL,Autauga County	29213	MO,Taney County
1003	AL,Baldwin County	29215	MO,Texas County
1005	AL,Barbour County	29217	MO,Vernon County
1007	AL,Bibb County	29219	MO,Warren County
1009	AL,Blount County	29221	MO,Washington County
1011	AL,Bullock County	29223	MO,Wayne County
1013	AL,Butler County	29225	MO,Webster County
1015	AL,Calhoun County	29227	MO,Worth County
1017	AL,Chambers County	29229	MO,Wright County
1019	AL,Cherokee County	29510	MO,St. Louis City
1021	AL,Chilton County	30001	MT,Beaverhead County
1023	AL,Choctaw County	30003	MT,Big Horn County
1025	AL,Clarke County	30005	MT,Blaine County
1027	AL,Clay County	30007	MT,Broadwater County
1029	AL,Cleburne County	30009	MT,Carbon County
1031	AL,Coffee County	30011	MT,Carter County
1033	AL,Colbert County	30013	MT,Cascade County

RPA Data Wiz Name Access FIELD NAME	Definition
1035	AL,Conecuh County
1037	AL,Coosa County
1039	AL,Covington County
1041	AL,Crenshaw County
1043	AL,Cullman County
1045	AL,Dale County
1047	AL,Dallas County
1049	AL,DeKalb County
1051	AL,Elmore County
1053	AL,Escambia County
1055	AL,Etowah County
1057	AL,Fayette County
1059	AL,Franklin County
1061	AL,Geneva County
1063	AL,Greene County
1065	AL,Hale County
1067	AL,Henry County
1069	AL,Houston County
1071	AL,Jackson County
1073	AL,Jefferson County
1075	AL,Lamar County
1077	AL,Lauderdale County
1079	AL,Lawrence County
1081	AL,Lee County
1083	AL,Limestone County
1085	AL,Lowndes County
1087	AL,Macon County
1089	AL,Madison County
1091	AL,Marengo County
1093	AL,Marion County
1095	AL,Marshall County
1097	AL,Mobile County
1099	AL,Monroe County
1101	AL,Montgomery County
1103	AL,Morgan County
1105	AL,Perry County
1107	AL,Pickens County
1109	AL,Pike County
1111	AL,Randolph County
1113	AL,Russell County
1115	AL,St. Clair County
1117	AL,Shelby County
1119	AL,Sumter County
1121	AL,Talladega County
1123	AL,Tallapoosa County
1125	AL,Tuscaloosa County
1127	AL,Walker County
1129	AL,Washington County
30015	MT,Chouteau County
30017	MT,Custer County
30019	MT,Daniels County
30021	MT,Dawson County
30023	MT,Deer Lodge County
30025	MT,Fallon County
30027	MT,Fergus County
30029	MT,Flathead County
30031	MT,Gallatin County
30033	MT,Garfield County
30035	MT,Glacier County
30037	MT,Golden Valley County
30039	MT,Granite County
30041	MT,Hill County
30043	MT,Jefferson County
30045	MT,Judith Basin County
30047	MT,Lake County
30049	MT,Lewis and Clark County
30051	MT,Liberty County
30053	MT,Lincoln County
30055	MT,McCone County
30057	MT,Madison County
30059	MT,Meagher County
30061	MT,Mineral County
30063	MT,Missoula County
30065	MT,Musselshell County
30067	MT,Park County
30069	MT,Petroleum County
30071	MT,Phillips County
30073	MT,Pondera County
30075	MT,Powder River County
30077	MT,Powell County
30079	MT,Prairie County
30081	MT,Ravalli County
30083	MT,Richland County
30085	MT,Roosevelt County
30087	MT,Rosebud County
30089	MT,Sanders County
30091	MT,Sheridan County
30093	MT,Silver Bow County
30095	MT,Stillwater County
30097	MT,Sweet Grass County
30099	MT,Teton County
30101	MT,Toole County
30103	MT,Treasure County
30105	MT,Valley County
30107	MT,Wheatland County
30109	MT,Wibaux County

RPA Data Wiz Name Access FIELD NAME	Definition
1131	AL,Wilcox County
1133	AL,Winston County
2000	AK,Undetermined
2100	AK,Haines Borough
2110	AK,Juneau Borough
2130	AK,Ketchikan Gateway Borough
2201	AK,Prince of Wales Outer Ketchikan Census
2220	AK,Sitka Borough
2231	AK,Skagway Yakutat Angoon Census
2280	AK,Wrangell Petersburg Census
4001	AZ,Apache County
4003	AZ,Cochise County
4005	AZ,Coconino County
4007	AZ,Gila County
4009	AZ,Graham County
4011	AZ,Greenlee County
4012	AZ,La Paz County
4013	AZ,Maricopa County
4015	AZ,Mohave County
4017	AZ,Navajo County
4019	AZ,Pima County
4021	AZ,Pinal County
4023	AZ,Santa Cruz County
4025	AZ,Yavapai County
4027	AZ,Yuma County
4999	AZ,Undetermined County
5001	AR,Arkansas County
5003	AR,Ashley County
5005	AR,Baxter County
5007	AR,Benton County
5009	AR,Boone County
5011	AR,Bradley County
5013	AR,Calhoun County
5015	AR,Carroll County
5017	AR,Chicot County
5019	AR,Clark County
5021	AR,Clay County
5023	AR,Cleburne County
5025	AR,Cleveland County
5027	AR,Columbia County
5029	AR,Conway County
5031	AR,Craighead County
5033	AR,Crawford County
5035	AR,Crittenden County
5037	AR,Cross County
5039	AR,Dallas County
30111	MT,Yellowstone County
30113	MT,Yellowstone National Park
30999	MT,Undetermined County
31001	NE,Adams County
31003	NE,Antelope County
31005	NE,Arthur County
31007	NE,Banner County
31009	NE,Blaine County
31011	NE,Boone County
31013	NE,Box Butte County
31015	NE,Boyd County
31017	NE,Brown County
31019	NE,Buffalo County
31021	NE,Burt County
31023	NE,Butler County
31025	NE,Cass County
31027	NE,Cedar County
31029	NE,Chase County
31031	NE,Cherry County
31033	NE,Cheyenne County
31035	NE,Clay County
31037	NE,Colfax County
31039	NE,Cuming County
31041	NE,Custer County
31043	NE,Dakota County
31045	NE,Dawes County
31047	NE,Dawson County
31049	NE,Deuel County
31051	NE,Dixon County
31053	NE,Dodge County
31055	NE,Douglas County
31057	NE,Dundy County
31059	NE,Fillmore County
31061	NE,Franklin County
31063	NE,Frontier County
31065	NE,Furnas County
31067	NE,Gage County
31069	NE,Garden County
31071	NE,Garfield County
31073	NE,Gosper County
31075	NE,Grant County
31077	NE,Greeley County
31079	NE,Hall County
31081	NE,Hamilton County
31083	NE,Harlan County
31085	NE,Hayes County
31087	NE,Hitchcock County
31089	NE,Holt County

RPA Data Wiz Name Access FIELD NAME	Definition
5041	AR,Desha County
5043	AR,Drew County
5045	AR,Faulkner County
5047	AR,Franklin County
5049	AR,Fulton County
5051	AR,Garland County
5053	AR,Grant County
5055	AR,Greene County
5057	AR,Hempstead County
5059	AR,Hot Spring County
5061	AR,Howard County
5063	AR,Independence County
5065	AR,Izard County
5067	AR,Jackson County
5069	AR,Jefferson County
5071	AR,Johnson County
5073	AR,Lafayette County
5075	AR,Lawrence County
5077	AR,Lee County
5079	AR,Lincoln County
5081	AR,Little River County
5083	AR,Logan County
5085	AR,Lonoke County
5087	AR,Madison County
5089	AR,Marion County
5091	AR,Miller County
5093	AR,Mississippi County
5095	AR,Monroe County
5097	AR,Montgomery County
5099	AR,Nevada County
5101	AR,Newton County
5103	AR,Ouachita County
5105	AR,Perry County
5107	AR,Phillips County
5109	AR,Pike County
5111	AR,Poinsett County
5113	AR,Polk County
5115	AR,Pope County
5117	AR,Prairie County
5119	AR,Pulaski County
5121	AR,Randolph County
5123	AR,St. Francis County
5125	AR,Saline County
5127	AR,Scott County
5129	AR,Searcy County
5131	AR,Sebastian County
5133	AR,Sevier County
5135	AR,Sharp County
31091	NE,Hooker County
31093	NE,Howard County
31095	NE,Jefferson County
31097	NE,Johnson County
31099	NE,Kearney County
31101	NE,Keith County
31103	NE,Keya Paha County
31105	NE,Kimball County
31107	NE,Knox County
31109	NE,Lancaster County
31111	NE,Lincoln County
31113	NE,Logan County
31115	NE,Loup County
31117	NE,McPherson County
31119	NE,Madison County
31121	NE,Merrick County
31123	NE,Morrill County
31125	NE,Nance County
31127	NE,Nemaha County
31129	NE,Nuckolls County
31131	NE,Otoe County
31133	NE,Pawnee County
31135	NE,Perkins County
31137	NE,Phelps County
31139	NE,Pierce County
31141	NE,Platte County
31143	NE,Polk County
31145	NE,Red Willow County
31147	NE,Richardson County
31149	NE,Rock County
31151	NE,Saline County
31153	NE,Sarpy County
31155	NE,Saunders County
31157	NE,Scotts Bluff County
31159	NE,Seward County
31161	NE,Sheridan County
31163	NE,Sherman County
31165	NE,Sioux County
31167	NE,Stanton County
31169	NE,Thayer County
31171	NE,Thomas County
31173	NE,Thurston County
31175	NE,Valley County
31177	NE,Washington County
31179	NE,Wayne County
31181	NE,Webster County
31183	NE,Wheeler County
31185	NE,York County

RPA Data Wiz Name Access FIELD NAME	Definition
5137	AR,Stone County
5139	AR,Union County
5141	AR,Van Buren County
5143	AR,Washington County
5145	AR,White County
5147	AR,Woodruff County
5149	AR,Yell County
6001	CA,Alameda County
6003	CA,Alpine County
6005	CA,Amador County
6007	CA,Butte County
6009	CA,Calaveras County
6011	CA,Colusa County
6013	CA,Contra Costa County
6015	CA,Del Norte County
6017	CA,El Dorado County
6019	CA,Fresno County
6021	CA,Glenn County
6023	CA,Humboldt County
6025	CA,Imperial County
6027	CA,Inyo County
6029	CA,Kern County
6031	CA,Kings County
6033	CA,Lake County
6035	CA,Lassen County
6037	CA,Los Angeles County
6039	CA,Madera County
6041	CA,Marin County
6043	CA,Mariposa County
6045	CA,Mendocino County
6047	CA,Merced County
6049	CA,Modoc County
6051	CA,Mono County
6053	CA,Monterey County
6055	CA,Napa County
6057	CA,Nevada County
6059	CA,Orange County
6061	CA,Placer County
6063	CA,Plumas County
6065	CA,Riverside County
6067	CA,Sacramento County
6069	CA,San Benito County
6071	CA,San Bernardino County
6073	CA,San Diego County
6075	CA,San Francisco County
6077	CA,San Joaquin County
6079	CA,San Luis Obispo County
6081	CA,San Mateo County
32001	NV,Churchill County
32003	NV,Clark County
32005	NV,Douglas County
32007	NV,Elko County
32009	NV,Esmeralda County
32011	NV,Eureka County
32013	NV,Humboldt County
32015	NV,Lander County
32017	NV,Lincoln County
32019	NV,Lyon County
32021	NV,Mineral County
32023	NV,Nye County
32027	NV,Pershing County
32029	NV,Storey County
32031	NV,Washoe County
32033	NV,White Pine County
32510	NV,Carson City
32666	NV,Toiybe National Forest
32999	NV,Undetermined County
33001	NH,Belknap County
33003	NH,Carroll County
33005	NH,Cheshire County
33007	NH,Coos County
33009	NH,Grafton County
33011	NH,Hillsborough County
33013	NH,Merrimack County
33015	NH,Rockingham County
33017	NH,Strafford County
33019	NH,Sullivan County
34001	NJ,Atlantic County
34003	NJ,Bergen County
34005	NJ,Burlington County
34007	NJ,Camden County
34009	NJ,Cape May County
34011	NJ,Cumberland County
34013	NJ,Essex County
34015	NJ,Gloucester County
34017	NJ,Hudson County
34019	NJ,Hunterdon County
34021	NJ,Mercer County
34023	NJ,Middlesex County
34025	NJ,Monmouth County
34027	NJ,Morris County
34029	NJ,Ocean County
34031	NJ,Passaic County
34033	NJ,Salem County
34035	NJ,Somerset County
34037	NJ,Sussex County

RPA Data Wiz Name Access FIELD NAME	Definition
6083	CA,Santa Barbara County
6085	CA,Santa Clara County
6087	CA,Santa Cruz County
6089	CA,Shasta County
6091	CA,Sierra County
6093	CA,Siskiyou County
6095	CA,Solano County
6097	CA,Sonoma County
6099	CA,Stanislaus County
6101	CA,Sutter County
6103	CA,Tehama County
6105	CA,Trinity County
6107	CA,Tulare County
6109	CA,Tuolumne County
6111	CA,Ventura County
6113	CA,Yolo County
6115	CA,Yuba County
6666	CA,Toiyabe National Forest
8001	CO,Adams County
8003	CO,Alamosa County
8005	CO,Arapahoe County
8007	CO,Archuleta County
8009	CO,Baca County
8011	CO,Bent County
8013	CO,Boulder County
8015	CO,Chaffee County
8017	CO,Cheyenne County
8019	CO,Clear Creek County
8021	CO,Conejos County
8023	CO,Costilla County
8025	CO,Crowley County
8027	CO,Custer County
8029	CO,Delta County
8031	CO,Denver County
8033	CO,Dolores County
8035	CO,Douglas County
8037	CO,Eagle County
8039	CO,Elbert County
8041	CO,El Paso County
8043	CO,Fremont County
8045	CO,Garfield County
8047	CO,Gilpin County
8049	CO,Grand County
8051	CO,Gunnison County
8053	CO,Hinsdale County
8055	CO,Huerfano County
8057	CO,Jackson County
8059	CO,Jefferson County
34039	NJ,Union County
34041	NJ,Warren County
35001	NM,Bernalillo County
35003	NM,Catron County
35005	NM,Chaves County
35006	NM,Cibola County
35007	NM,Colfax County
35009	NM,Curry County
35011	NM,DeBaca County
35013	NM,Dona Ana County
35015	NM,Eddy County
35017	NM,Grant County
35019	NM,Guadalupe County
35021	NM,Harding County
35023	NM,Hidalgo County
35025	NM,Lea County
35027	NM,Lincoln County
35028	NM,Los Alamos
35029	NM,Luna County
35031	NM,McKinley County
35033	NM,Mora County
35035	NM,Otero County
35037	NM,Quay County
35039	NM,Rio Arriba County
35041	NM,Roosevelt County
35043	NM,Sandoval County
35045	NM,San Juan County
35047	NM,San Miguel County
35049	NM,Santa Fe County
35051	NM,Sierra County
35053	NM,Socorro County
35055	NM,Taos County
35057	NM,Torrance County
35059	NM,Union County
35061	NM,Valencia County
35999	NM,Undetermined County
36001	NY,Albany County
36003	NY,Allegany County
36005	NY,Bronx County
36007	NY,Broome County
36009	NY,Cattaraugus County
36011	NY,Cayuga County
36013	NY,Chautauqua County
36015	NY,Chemung County
36017	NY,Chenango County
36019	NY,Clinton County
36021	NY,Columbia County
36023	NY,Cortland County

RPA Data Wiz Name Access FIELD NAME	Definition
8061	CO,Kiowa County
8063	CO,Kit Carson County
8065	CO,Lake County
8067	CO,La Plata County
8069	CO,Larimer County
8071	CO,Las Animas County
8073	CO,Lincoln County
8075	CO,Logan County
8077	CO,Mesa County
8079	CO,Mineral County
8081	CO,Moffat County
8083	CO,Montezuma County
8085	CO,Montrose County
8087	CO,Morgan County
8089	CO,Otero County
8091	CO,Ouray County
8093	CO,Park County
8095	CO,Phillips County
8097	CO,Pitkin County
8099	CO,Prowers County
8101	CO,Pueblo County
8103	CO,Rio Blanco County
8105	CO,Rio Grande County
8107	CO,Routt County
8109	CO,Saguache County
8111	CO,San Juan County
8113	CO,San Miguel County
8115	CO,Sedgwick County
8117	CO,Summit County
8119	CO,Teller County
8121	CO,Washington County
8123	CO,Weld County
8125	CO,Yuma County
8660	CO,GM-UNC-Gun National Forest
8661	CO,Rio Grande National Forest
8662	CO,Arapaho-Roosevelt National Forest
8663	CO,Routt National Forest
8664	CO,Pike-San Isabel National Forest
8665	CO,San Juan National Forest
8666	CO,White River National Forest
8999	CO,Undetermined County
9001	CT,Fairfield County
9003	CT,Hartford County
9005	CT,Litchfield County
36025	NY,Delaware County
36027	NY,Dutchess County
36029	NY,Erie County
36031	NY,Essex County
36033	NY,Franklin County
36035	NY,Fulton County
36037	NY,Genesee County
36039	NY,Greene County
36041	NY,Hamilton County
36043	NY,Herkimer County
36045	NY,Jefferson County
36047	NY,Kings County
36049	NY,Lewis County
36051	NY,Livingston County
36053	NY,Madison County
36055	NY,Monroe County
36057	NY,Montgomery County
36059	NY,Nassau County
36061	NY,New York County
36063	NY,Niagara County
36065	NY,Oneida County
36067	NY,Onondaga County
36069	NY,Ontario County
36071	NY,Orange County
36073	NY,Orleans County
36075	NY,Oswego County
36077	NY,Otsego County
36079	NY,Putnam County
36081	NY,Queens County
36083	NY,Rensselaer County
36085	NY,Richmond County
36087	NY,Rockland County
36089	NY,St. Lawrence County
36091	NY,Saratoga County
36093	NY,Schenectady County
36095	NY,Schoharie County
36097	NY,Schuyler County
36099	NY,Seneca County
36101	NY,Steuben County
36103	NY,Suffolk County
36105	NY,Sullivan County
36107	NY,Tioga County
36109	NY,Tompkins County
36111	NY,Ulster County
36113	NY,Warren County
36115	NY,Washington County
36117	NY,Wayne County
36119	NY,Westchester County

RPA Data Wiz Name Access FIELD NAME	Definition
9007	CT,Middlesex County
9009	CT,New Haven County
9011	CT,New London County
9013	CT,Tolland County
9015	CT,Windham County
10001	DE,Kent County
10003	DE,New Castle County
10005	DE,Sussex County
11001	District of Columbia
12001	FL,Alachua County
12003	FL,Baker County
12005	FL,Bay County
12007	FL,Bradford County
12009	FL,Brevard County
12011	FL,Broward County
12013	FL,Calhoun County
12015	FL,Charlotte County
12017	FL,Citrus County
12019	FL,Clay County
12021	FL,Collier County
12023	FL,Columbia County
12025	FL,Dade County
12027	FL,DeSoto County
12029	FL,Dixie County
12031	FL,Duval County
12033	FL,Escambia County
12035	FL,Flagler County
12037	FL,Franklin County
12039	FL,Gadsden County
12041	FL,Gilchrist County
12043	FL,Glades County
12045	FL,Gulf County
12047	FL,Hamilton County
12049	FL,Hardee County
12051	FL,Hendry County
12053	FL,Hernando County
12055	FL,Highlands County
12057	FL,Hillsborough County
12059	FL,Holmes County
12061	FL,Indian River County
12063	FL,Jackson County
12065	FL,Jefferson County
12067	FL,Lafayette County
12069	FL,Lake County
12071	FL,Lee County
12073	FL,Leon County
12075	FL,Levy County
12077	FL,Liberty County
36121	NY,Wyoming County
36123	NY,Yates County
37001	NC,Alamance County
37003	NC,Alexander County
37005	NC,Alleghany County
37007	NC,Anson County
37009	NC,Ashe County
37011	NC,Avery County
37013	NC,Beaufort County
37015	NC,Bertie County
37017	NC,Bladen County
37019	NC,Brunswick County
37021	NC,Buncombe County
37023	NC,Burke County
37025	NC,Cabarrus County
37027	NC,Caldwell County
37029	NC,Camden County
37031	NC,Carteret County
37033	NC,Caswell County
37035	NC,Catawba County
37037	NC,Chatham County
37039	NC,Cherokee County
37041	NC,Chowan County
37043	NC,Clay County
37045	NC,Cleveland County
37047	NC,Columbus County
37049	NC,Craven County
37051	NC,Cumberland County
37053	NC,Currituck County
37055	NC,Dare County
37057	NC,Davidson County
37059	NC,Davie County
37061	NC,Duplin County
37063	NC,Durham County
37065	NC,Edgecombe County
37067	NC,Forsyth County
37069	NC,Franklin County
37071	NC,Gaston County
37073	NC,Gates County
37075	NC,Graham County
37077	NC,Granville County
37079	NC,Greene County
37081	NC,Guilford County
37083	NC,Halifax County
37085	NC,Harnett County
37087	NC,Haywood County
37089	NC,Henderson County
37091	NC,Hertford County

RPA Data Wiz Name Access FIELD NAME	Definition
12079	FL,Madison County
12081	FL,Manatee County
12083	FL,Marion County
12085	FL,Martin County
12087	FL,Monroe County
12089	FL,Nassau County
12091	FL,Okaloosa County
12093	FL,Okeechobee County
12095	FL,Orange County
12097	FL,Osceola County
12099	FL,Palm Beach County
12101	FL,Pasco County
12103	FL,Pinellas County
12105	FL,Polk County
12107	FL,Putnam County
12109	FL,St. Johns County
12111	FL,St. Lucie County
12113	FL,Santa Rosa County
12115	FL,Sarasota County
12117	FL,Seminole County
12119	FL,Sumter County
12121	FL,Suwannee County
12123	FL,Taylor County
12125	FL,Union County
12127	FL,Volusia County
12129	FL,Wakulla County
12131	FL,Walton County
12133	FL,Washington County
13001	GA,Appling County
13003	GA,Atkinson County
13005	GA,Bacon County
13007	GA,Baker County
13009	GA,Baldwin County
13011	GA,Banks County
13013	GA,Barrow County
13015	GA,Bartow County
13017	GA,Ben Hill County
13019	GA,Berrien County
13021	GA,Bibb County
13023	GA,Bleckley County
13025	GA,Brantley County
13027	GA,Brooks County
13029	GA,Bryan County
13031	GA,Bulloch County
13033	GA,Burke County
13035	GA,Butts County
13037	GA,Calhoun County
13039	GA,Camden County
37093	NC,Hoke County
37095	NC,Hyde County
37097	NC,Iredell County
37099	NC,Jackson County
37101	NC,Johnston County
37103	NC,Jones County
37105	NC,Lee County
37107	NC,Lenoir County
37109	NC,Lincoln County
37111	NC,McDowell County
37113	NC,Macon County
37115	NC,Madison County
37117	NC,Martin County
37119	NC,Mecklenburg County
37121	NC,Mitchell County
37123	NC,Montgomery County
37125	NC,Moore County
37127	NC,Nash County
37129	NC,New Hanover County
37131	NC,Northampton County
37133	NC,Onslow County
37135	NC,Orange County
37137	NC,Pamlico County
37139	NC,Pasquotank County
37141	NC,Pender County
37143	NC,Perquimans County
37145	NC,Person County
37147	NC,Pitt County
37149	NC,Polk County
37151	NC,Randolph County
37153	NC,Richmond County
37155	NC,Robeson County
37157	NC,Rockingham County
37159	NC,Rowan County
37161	NC,Rutherford County
37163	NC,Sampson County
37165	NC,Scotland County
37167	NC,Stanly County
37169	NC,Stokes County
37171	NC,Surry County
37173	NC,Swain County
37175	NC,Transylvania County
37177	NC,Tyrrell County
37179	NC,Union County
37181	NC,Vance County
37183	NC,Wake County
37185	NC,Warren County
37187	NC,Washington County

RPA Data Wiz Name Access FIELD NAME	Definition
13043	GA,Candler County
13045	GA,Carroll County
13047	GA,Catoosa County
13049	GA,Charlton County
13051	GA,Chatham County
13053	GA,Chattahoochee County
13055	GA,Chattooga County
13057	GA,Cherokee County
13059	GA,Clarke County
13061	GA,Clay County
13063	GA,Clayton County
13065	GA,Clinch County
13067	GA,Cobb County
13069	GA,Coffee County
13071	GA,Colquitt County
13073	GA,Columbia County
13075	GA,Cook County
13077	GA,Coweta County
13079	GA,Crawford County
13081	GA,Crisp County
13083	GA,Dade County
13085	GA,Dawson County
13087	GA,Decatur County
13089	GA,DeKalb County
13091	GA,Dodge County
13093	GA,Dooly County
13095	GA,Dougherty County
13097	GA,Douglas County
13099	GA,Early County
13101	GA,Echols County
13103	GA,Effingham County
13105	GA,Elbert County
13107	GA,Emanuel County
13109	GA,Evans County
13111	GA,Fannin County
13113	GA,Fayette County
13115	GA,Floyd County
13117	GA,Forsyth County
13119	GA,Franklin County
13121	GA,Fulton County
13123	GA,Gilmer County
13125	GA,Glascock County
13127	GA,Glynn County
13129	GA,Gordon County
13131	GA,Grady County
13133	GA,Greene County
13135	GA,Gwinnett County
13137	GA,Habersham County
37189	NC,Watauga County
37191	NC,Wayne County
37193	NC,Wilkes County
37195	NC,Wilson County
37197	NC,Yadkin County
37199	NC,Yancey County
38001	ND,Adams County
38003	ND,Barnes County
38005	ND,Benson County
38007	ND,Billings County
38009	ND,Bottineau County
38011	ND,Bowman County
38013	ND,Burke County
38015	ND,Burleigh County
38017	ND,Cass County
38019	ND,Cavalier County
38021	ND,Dickey County
38023	ND,Divide County
38025	ND,Dunn County
38027	ND,Eddy County
38029	ND,Emmons County
38031	ND,Foster County
38033	ND,Golden Valley County
38035	ND,Grand Forks County
38037	ND,Grant County
38039	ND,Griggs County
38041	ND,Hettinger County
38043	ND,Kidder County
38045	ND,LaMoure County
38047	ND,Logan County
38049	ND,McHenry County
38051	ND,McIntosh County
38053	ND,McKenzie County
38055	ND,McLean County
38057	ND,Mercer County
38059	ND,Morton County
38061	ND,Mountrail County
38063	ND,Nelson County
38065	ND,Oliver County
38067	ND,Pembina County
38069	ND,Pierce County
38071	ND,Ramsey County
38073	ND,Ransom County
38075	ND,Renville County
38077	ND,Richland County
38079	ND,Rolette County
38081	ND,Sargent County
38083	ND,Sheridan County

RPA Data Wiz Name Access FIELD NAME	Definition
13139	GA,Hall County
13141	GA,Hancock County
13143	GA,Haralson County
13145	GA,Harris County
13147	GA,Hart County
13149	GA,Heard County
13151	GA,Henry County
13153	GA,Houston County
13155	GA,Irwin County
13157	GA,Jackson County
13159	GA,Jasper County
13161	GA,Jeff Davis County
13163	GA,Jefferson County
13165	GA,Jenkins County
13167	GA,Johnson County
13169	GA,Jones County
13171	GA,Lamar County
13173	GA,Lanier County
13175	GA,Laurens County
13177	GA,Lee County
13179	GA,Liberty County
13181	GA,Lincoln County
13183	GA,Long County
13185	GA,Lowndes County
13187	GA,Lumpkin County
13189	GA,McDuffie County
13191	GA,McIntosh County
13193	GA,Macon County
13195	GA,Madison County
13197	GA,Marion County
13199	GA,Meriwether County
13201	GA,Miller County
13205	GA,Mitchell County
13207	GA,Monroe County
13209	GA,Montgomery County
13211	GA,Morgan County
13213	GA,Murray County
13215	GA,Muscogee County
13217	GA,Newton County
13219	GA,Oconee County
13221	GA,Oglethorpe County
13223	GA,Paulding County
13225	GA,Peach County
13227	GA,Pickens County
13229	GA,Pierce County
13231	GA,Pike County
13233	GA,Polk County
13235	GA,Pulaski County
38085	ND,Sioux County
38087	ND,Slope County
38089	ND,Stark County
38091	ND,Steele County
38093	ND,Stutsman County
38095	ND,Towner County
38097	ND,Traill County
38099	ND,Walsh County
38101	ND,Ward County
38103	ND,Wells County
38105	ND,Williams County
39001	OH,Adams County
39003	OH,Allen County
39005	OH,Ashland County
39007	OH,Ashtabula County
39009	OH,Athens County
39011	OH,Auglaize County
39013	OH,Belmont County
39015	OH,Brown County
39017	OH,Butler County
39019	OH,Carroll County
39021	OH,Champaign County
39023	OH,Clark County
39025	OH,Clermont County
39027	OH,Clinton County
39029	OH,Columbiana County
39031	OH,Coshocton County
39033	OH,Crawford County
39035	OH,Cuyahoga County
39037	OH,Darke County
39039	OH,Defiance County
39041	OH,Delaware County
39043	OH,Erie County
39045	OH,Fairfield County
39047	OH,Fayette County
39049	OH,Franklin County
39051	OH,Fulton County
39053	OH,Gallia County
39055	OH,Geauga County
39057	OH,Greene County
39059	OH,Guernsey County
39061	OH,Hamilton County
39063	OH,Hancock County
39065	OH,Hardin County
39067	OH,Harrison County
39069	OH,Henry County
39071	OH,Highland County
39073	OH,Hocking County

RPA Data Wiz Name Access FIELD NAME	Definition
13237	GA,Putnam County
13239	GA,Quitman County
13241	GA,Rabun County
13243	GA,Randolph County
13245	GA,Richmond County
13247	GA,Rockdale County
13249	GA,Schley County
13251	GA,Screven County
13253	GA,Seminole County
13255	GA,Spalding County
13257	GA,Stephens County
13259	GA,Stewart County
13261	GA,Sumter County
13263	GA,Talbot County
13265	GA,Taliaferro County
13267	GA,Tattnall County
13269	GA,Taylor County
13271	GA,Telfair County
13273	GA,Terrell County
13275	GA,Thomas County
13277	GA,Tift County
13279	GA,Toombs County
13281	GA,Towns County
13283	GA,Treutlen County
13285	GA,Troup County
13287	GA,Turner County
13289	GA,Twiggs County
13291	GA,Union County
13293	GA,Upson County
13295	GA,Walker County
13297	GA,Walton County
13299	GA,Ware County
13301	GA,Warren County
13303	GA,Washington County
13305	GA,Wayne County
13307	GA,Webster County
13309	GA,Wheeler County
13311	GA,White County
13313	GA,Whitfield County
13315	GA,Wilcox County
13317	GA,Wilkes County
13319	GA,Wilkinson County
13321	GA,Worth County
15001	HI,Hawaii County
16001	ID,Ada County
16003	ID,Adams County
16005	ID,Bannock County
16007	ID,Bear Lake County
39075	OH,Holmes County
39077	OH,Huron County
39079	OH,Jackson County
39081	OH,Jefferson County
39083	OH,Knox County
39085	OH,Lake County
39087	OH,Lawrence County
39089	OH,Licking County
39091	OH,Logan County
39093	OH,Lorain County
39095	OH,Lucas County
39097	OH,Madison County
39099	OH,Mahoning County
39101	OH,Marion County
39103	OH,Medina County
39105	OH,Meigs County
39107	OH,Mercer County
39109	OH,Miami County
39111	OH,Monroe County
39113	OH,Montgomery County
39115	OH,Morgan County
39117	OH,Morrow County
39119	OH,Muskingum County
39121	OH,Noble County
39123	OH,Ottawa County
39125	OH,Paulding County
39127	OH,Perry County
39129	OH,Pickaway County
39131	OH,Pike County
39133	OH,Portage County
39135	OH,Preble County
39137	OH,Putnam County
39139	OH,Richland County
39141	OH,Ross County
39143	OH,Sandusky County
39145	OH,Scioto County
39147	OH,Seneca County
39149	OH,Shelby County
39151	OH,Stark County
39153	OH,Summit County
39155	OH,Trumbull County
39157	OH,Tuscarawas County
39159	OH,Union County
39161	OH,Van Wert County
39163	OH,Vinton County
39165	OH,Warren County
39167	OH,Washington County
39169	OH,Wayne County

RPA Data Wiz Name Access FIELD NAME	Definition
16009	ID,Benewah County
16011	ID,Bingham County
16013	ID,Blaine County
16015	ID,Boise County
16017	ID,Bonner County
16019	ID,Bonneville County
16021	ID,Boundary County
16023	ID,Butte County
16025	ID,Camas County
16027	ID,Canyon County
16029	ID,Caribou County
16031	ID,Cassia County
16033	ID,Clark County
16035	ID,Clearwater County
16037	ID,Custer County
16039	ID,Elmore County
16041	ID,Franklin County
16043	ID,Fremont County
16045	ID,Gem County
16047	ID,Gooding County
16049	ID,Idaho County
16051	ID,Jefferson County
16053	ID,Jerome County
16055	ID,Kootenai County
16057	ID,Latah County
16059	ID,Lemhi County
16061	ID,Lewis County
16063	ID,Lincoln County
16065	ID,Madison County
16067	ID,Minidoka County
16069	ID,Nez Perce County
16071	ID,Oneida County
16073	ID,Owyhee County
16075	ID,Payette County
16077	ID,Power County
16079	ID,Shoshone County
16081	ID,Teton County
16083	ID,Twin Falls County
16085	ID,Valley County
16087	ID,Washington County
16999	ID,Undetermined County
17001	IL,Adams County
17003	IL,Alexander County
17005	IL,Bond County
17007	IL,Boone County
17009	IL,Brown County
17011	IL,Bureau County
17013	IL,Calhoun County
39171	OH,Williams County
39173	OH,Wood County
39175	OH,Wyandot County
40001	OK,Adair County
40003	OK,Alfalfa County
40005	OK,Atoka County
40007	OK,Beaver County
40009	OK,Beckham County
40011	OK,Blaine County
40013	OK,Bryan County
40015	OK,Caddo County
40017	OK,Canadian County
40019	OK,Carter County
40021	OK,Cherokee County
40023	OK,Choctaw County
40025	OK,Cimarron County
40027	OK,Cleveland County
40029	OK,Coal County
40031	OK,Comanche County
40033	OK,Cotton County
40035	OK,Craig County
40037	OK,Creek County
40039	OK,Custer County
40041	OK,Delaware County
40043	OK,Dewey County
40045	OK,Ellis County
40047	OK,Garfield County
40049	OK,Garvin County
40051	OK,Grady County
40053	OK,Grant County
40055	OK,Greer County
40057	OK,Harmon County
40059	OK,Harper County
40061	OK,Haskell County
40063	OK,Hughes County
40065	OK,Jackson County
40067	OK,Jefferson County
40069	OK,Johnston County
40071	OK,Kay County
40073	OK,Kingfisher County
40075	OK,Kiowa County
40077	OK,Latimer County
40079	OK,Le Flore County
40081	OK,Lincoln County
40083	OK,Logan County
40085	OK,Love County
40087	OK,McClain County
40089	OK,McCurtain County

RPA Data Wiz Name Access FIELD NAME	Definition
17015	IL,Carroll County
17017	IL,Cass County
17019	IL,Champaign County
17021	IL,Christian County
17023	IL,Clark County
17025	IL,Clay County
17027	IL,Clinton County
17029	IL,Coles County
17031	IL,Cook County
17033	IL,Crawford County
17035	IL,Cumberland County
17037	IL,DeKalb County
17039	IL,De Witt County
17041	IL,Douglas County
17043	IL,DuPage County
17045	IL,Edgar County
17047	IL,Edwards County
17049	IL,Effingham County
17051	IL,Fayette County
17053	IL,Ford County
17055	IL,Franklin County
17057	IL,Fulton County
17059	IL,Gallatin County
17061	IL,Greene County
17063	IL,Grundy County
17065	IL,Hamilton County
17067	IL,Hancock County
17069	IL,Hardin County
17071	IL,Henderson County
17073	IL,Henry County
17075	IL,Iroquois County
17077	IL,Jackson County
17079	IL,Jasper County
17081	IL,Jefferson County
17083	IL,Jersey County
17085	IL,Jo Daviess County
17087	IL,Johnson County
17089	IL,Kane County
17091	IL,Kankakee County
17093	IL,Kendall County
17095	IL,Knox County
17097	IL,Lake County
17099	IL,La Salle County
17101	IL,Lawrence County
17103	IL,Lee County
17105	IL,Livingston County
17107	IL,Logan County
17109	IL,McDonough County
40091	OK,McIntosh County
40093	OK,Major County
40095	OK,Marshall County
40097	OK,Mayes County
40099	OK,Murray County
40101	OK,Muskogee County
40103	OK,Noble County
40105	OK,Nowata County
40107	OK,Okfuskee County
40109	OK,Oklahoma County
40111	OK,Okmulgee County
40113	OK,Osage County
40115	OK,Ottawa County
40117	OK,Pawnee County
40119	OK,Payne County
40121	OK,Pittsburg County
40123	OK,Pontotoc County
40125	OK,Pottawatomie County
40127	OK,Pushmataha County
40129	OK,Roger Mills County
40131	OK,Rogers County
40133	OK,Seminole County
40135	OK,Sequoyah County
40137	OK,Stephens County
40139	OK,Texas County
40141	OK,Tillman County
40143	OK,Tulsa County
40145	OK,Wagoner County
40147	OK,Washington County
40149	OK,Washita County
40151	OK,Woods County
40153	OK,Woodward County
41001	OR,Baker County
41003	OR,Benton County
41005	OR,Clackamas County
41007	OR,Clatsop County
41009	OR,Columbia County
41011	OR,Coos County
41013	OR,Crook County
41015	OR,Curry County
41017	OR,Deschutes County
41019	OR,Douglas County
41021	OR,Gilliam County
41023	OR,Grant County
41025	OR,Harney County
41027	OR,Hood River County
41029	OR,Jackson County
41031	OR,Jefferson County

RPA Data Wiz Name Access FIELD NAME	Definition
17111	IL,McHenry County
17113	IL,McLean County
17115	IL,Macon County
17117	IL,Macoupin County
17119	IL,Madison County
17121	IL,Marion County
17123	IL,Marshall County
17125	IL,Mason County
17127	IL,Massac County
17129	IL,Menard County
17131	IL,Mercer County
17133	IL,Monroe County
17135	IL,Montgomery County
17137	IL,Morgan County
17139	IL,Moultrie County
17141	IL,Ogle County
17143	IL,Peoria County
17145	IL,Perry County
17147	IL,Piatt County
17149	IL,Pike County
17151	IL,Pope County
17153	IL,Pulaski County
17155	IL,Putnam County
17157	IL,Randolph County
17159	IL,Richland County
17161	IL,Rock Island County
17163	IL,St. Clair County
17165	IL,Saline County
17167	IL,Sangamon County
17169	IL,Schuyler County
17171	IL,Scott County
17173	IL,Shelby County
17175	IL,Stark County
17177	IL,Stephenson County
17179	IL,Tazewell County
17181	IL,Union County
17183	IL,Vermilion County
17185	IL,Wabash County
17187	IL,Warren County
17189	IL,Washington County
17191	IL,Wayne County
17193	IL,White County
17195	IL,Whiteside County
17197	IL,Will County
17199	IL,Williamson County
17201	IL,Winnebago County
17203	IL,Woodford County
18001	IN,Adams County
41033	OR,Josephine County
41035	OR,Klamath County
41037	OR,Lake County
41039	OR,Lane County
41041	OR,Lincoln County
41043	OR,Linn County
41045	OR,Malheur County
41047	OR,Marion County
41049	OR,Morrow County
41051	OR,Multnomah County
41053	OR,Polk County
41055	OR,Sherman County
41057	OR,Tillamook County
41059	OR,Umatilla County
41061	OR,Union County
41063	OR,Wallowa County
41065	OR,Wasco County
41067	OR,Washington County
41069	OR,Wheeler County
41071	OR,Yamhill County
42001	PA,Adams County
42003	PA,Allegheny County
42005	PA,Armstrong County
42007	PA,Beaver County
42009	PA,Bedford County
42011	PA,Berks County
42013	PA,Blair County
42015	PA,Bradford County
42017	PA,Bucks County
42019	PA,Butler County
42021	PA,Cambria County
42023	PA,Cameron County
42025	PA,Carbon County
42027	PA,Centre County
42029	PA,Chester County
42031	PA,Clarion County
42033	PA,Clearfield County
42035	PA,Clinton County
42037	PA,Columbia County
42039	PA,Crawford County
42041	PA,Cumberland County
42043	PA,Dauphin County
42045	PA,Delaware County
42047	PA,Elk County
42049	PA,Erie County
42051	PA,Fayette County
42053	PA,Forest County
42055	PA,Franklin County

RPA Data Wiz Name Access FIELD NAME	Definition
18003	IN,Allen County
18005	IN,Bartholomew County
18007	IN,Benton County
18009	IN,Blackford County
18011	IN,Boone County
18013	IN,Brown County
18015	IN,Carroll County
18017	IN,Cass County
18019	IN,Clark County
18021	IN,Clay County
18023	IN,Clinton County
18025	IN,Crawford County
18027	IN,Daviess County
18029	IN,Dearborn County
18031	IN,Decatur County
18033	IN,De Kalb County
18035	IN,Delaware County
18037	IN,Dubois County
18039	IN,Elkhart County
18041	IN,Fayette County
18043	IN,Floyd County
18045	IN,Fountain County
18047	IN,Franklin County
18049	IN,Fulton County
18051	IN,Gibson County
18053	IN,Grant County
18055	IN,Greene County
18057	IN,Hamilton County
18059	IN,Hancock County
18061	IN,Harrison County
18063	IN,Hendricks County
18065	IN,Henry County
18067	IN,Howard County
18069	IN,Huntington County
18071	IN,Jackson County
18073	IN,Jasper County
18075	IN,Jay County
18077	IN,Jefferson County
18079	IN,Jennings County
18081	IN,Johnson County
18083	IN,Knox County
18085	IN,Kosciusko County
18087	IN,Lagrange County
18089	IN,Lake County
18091	IN,La Porte County
18093	IN,Lawrence County
18095	IN,Madison County
18097	IN,Marion County
42057	PA,Fulton County
42059	PA,Greene County
42061	PA,Huntingdon County
42063	PA,Indiana County
42065	PA,Jefferson County
42067	PA,Juniata County
42069	PA,Lackawanna County
42071	PA,Lancaster County
42073	PA,Lawrence County
42075	PA,Lebanon County
42077	PA,Lehigh County
42079	PA,Luzerne County
42081	PA,Lycoming County
42083	PA,Mc Kean County
42085	PA,Mercer County
42087	PA,Mifflin County
42089	PA,Monroe County
42091	PA,Montgomery County
42093	PA,Montour County
42095	PA,Northampton County
42097	PA,Northumberland County
42099	PA,Perry County
42101	PA,Philadelphia County
42103	PA,Pike County
42105	PA,Potter County
42107	PA,Schuylkill County
42109	PA,Snyder County
42111	PA,Somerset County
42113	PA,Sullivan County
42115	PA,Susquehanna County
42117	PA,Tioga County
42119	PA,Union County
42121	PA,Venango County
42123	PA,Warren County
42125	PA,Washington County
42127	PA,Wayne County
42129	PA,Westmoreland County
42131	PA,Wyoming County
42133	PA,York County
44001	RI,Bristol County
44003	RI,Kent County
44005	RI,Newport County
44007	RI,Providence County
44009	RI,Washington County
45001	SC,Abbeville County
45003	SC,Aiken County
45005	SC,Allendale County
45007	SC,Anderson County

RPA Data Wiz Name Access FIELD NAME	Definition
18099	IN,Marshall County
18101	IN,Martin County
18103	IN,Miami County
18105	IN,Monroe County
18107	IN,Montgomery County
18109	IN,Morgan County
18111	IN,Newton County
18113	IN,Noble County
18115	IN,Ohio County
18117	IN,Orange County
18119	IN,Owen County
18121	IN,Parke County
18123	IN,Perry County
18125	IN,Pike County
18127	IN,Porter County
18129	IN,Posey County
18131	IN,Pulaski County
18133	IN,Putnam County
18135	IN,Randolph County
18137	IN,Ripley County
18139	IN,Rush County
18141	IN,St. Joseph County
18143	IN,Scott County
18145	IN,Shelby County
18147	IN,Spencer County
18149	IN,Starke County
18151	IN,Steuben County
18153	IN,Sullivan County
18155	IN,Switzerland County
18157	IN,Tippecanoe County
18159	IN,Tipton County
18161	IN,Union County
18163	IN,Vanderburgh County
18165	IN,Vermillion County
18167	IN,Vigo County
18169	IN,Wabash County
18171	IN,Warren County
18173	IN,Warrick County
18175	IN,Washington County
18177	IN,Wayne County
18179	IN,Wells County
18181	IN,White County
18183	IN,Whitley County
19001	IA,Adair County
19003	IA,Adams County
19005	IA,Allamakee County
19007	IA,Appanoose County
19009	IA,Audubon County
45009	SC,Bamberg County
45011	SC,Barnwell County
45013	SC,Beaufort County
45015	SC,Berkeley County
45017	SC,Calhoun County
45019	SC,Charleston County
45021	SC,Cherokee County
45023	SC,Chester County
45025	SC,Chesterfield County
45027	SC,Clarendon County
45029	SC,Colleton County
45031	SC,Darlington County
45033	SC,Dillon County
45035	SC,Dorchester County
45037	SC,Edgefield County
45039	SC,Fairfield County
45041	SC,Florence County
45043	SC,Georgetown County
45045	SC,Greenville County
45047	SC,Greenwood County
45049	SC,Hampton County
45051	SC,Horry County
45053	SC,Jasper County
45055	SC,Kershaw County
45057	SC,Lancaster County
45059	SC,Laurens County
45061	SC,Lee County
45063	SC,Lexington County
45065	SC,McCormick County
45067	SC,Marion County
45069	SC,Marlboro County
45071	SC,Newberry County
45073	SC,Oconee County
45075	SC,Orangeburg County
45077	SC,Pickens County
45079	SC,Richland County
45081	SC,Saluda County
45083	SC,Spartanburg County
45085	SC,Sumter County
45087	SC,Union County
45089	SC,Williamsburg County
45091	SC,York County
46003	SD,Aurora County
46005	SD,Beadle County
46007	SD,Bennett County
46009	SD,Bon Homme County
46011	SD,Brookings County
46013	SD,Brown County

RPA Data Wiz Name Access FIELD NAME	Definition
19011	IA,Benton County
19013	IA,Black Hawk County
19015	IA,Boone County
19017	IA,Bremer County
19019	IA,Buchanan County
19021	IA,Buena Vista County
19023	IA,Butler County
19025	IA,Calhoun County
19027	IA,Carroll County
19029	IA,Cass County
19031	IA,Cedar County
19033	IA,Cerro Gordo County
19035	IA,Cherokee County
19037	IA,Chickasaw County
19039	IA,Clarke County
19041	IA,Clay County
19043	IA,Clayton County
19045	IA,Clinton County
19047	IA,Crawford County
19049	IA,Dallas County
19051	IA,Davis County
19053	IA,Decatur County
19055	IA,Delaware County
19057	IA,Des Moines County
19059	IA,Dickinson County
19061	IA,Dubuque County
19063	IA,Emmet County
19065	IA,Fayette County
19067	IA,Floyd County
19069	IA,Franklin County
19071	IA,Fremont County
19073	IA,Greene County
19075	IA,Grundy County
19077	IA,Guthrie County
19079	IA,Hamilton County
19081	IA,Hancock County
19083	IA,Hardin County
19085	IA,Harrison County
19087	IA,Henry County
19089	IA,Howard County
19091	IA,Humboldt County
19093	IA,Ida County
19095	IA,Iowa County
19097	IA,Jackson County
19099	IA,Jasper County
19101	IA,Jefferson County
19103	IA,Johnson County
19105	IA,Jones County
46015	SD,Brule County
46017	SD,Buffalo County
46019	SD,Butte County
46021	SD,Campbell County
46023	SD,Charles Mix County
46025	SD,Clark County
46027	SD,Clay County
46029	SD,Codington County
46031	SD,Corson County
46033	SD,Custer County
46035	SD,Davison County
46037	SD,Day County
46039	SD,Deuel County
46041	SD,Dewey County
46043	SD,Douglas County
46045	SD,Edmunds County
46047	SD,Fall River County
46049	SD,Faulk County
46051	SD,Grant County
46053	SD,Gregory County
46055	SD,Haakon County
46057	SD,Hamlin County
46059	SD,Hand County
46061	SD,Hanson County
46063	SD,Harding County
46065	SD,Hughes County
46067	SD,Hutchinson County
46069	SD,Hyde County
46071	SD,Jackson County
46073	SD,Jerauld County
46075	SD,Jones County
46077	SD,Kingsbury County
46079	SD,Lake County
46081	SD,Lawrence County
46083	SD,Lincoln County
46085	SD,Lyman County
46087	SD,McCook County
46089	SD,McPherson County
46091	SD,Marshall County
46093	SD,Meade County
46095	SD,Mellette County
46097	SD,Miner County
46099	SD,Minnehaha County
46101	SD,Moody County
46103	SD,Pennington County
46105	SD,Perkins County
46107	SD,Potter County
46109	SD,Roberts County

RPA Data Wiz Name Access FIELD NAME	Definition
19107	IA,Keokuk County
19109	IA,Kossuth County
19111	IA,Lee County
19113	IA,Linn County
19115	IA,Louisa County
19117	IA,Lucas County
19119	IA,Lyon County
19121	IA,Madison County
19123	IA,Mahaska County
19125	IA,Marion County
19127	IA,Marshall County
19129	IA,Mills County
19131	IA,Mitchell County
19133	IA,Monona County
19135	IA,Monroe County
19137	IA,Montgomery County
19139	IA,Muscatine County
19141	IA,O'Brien County
19143	IA,Osceola County
19145	IA,Page County
19147	IA,Palo Alto County
19149	IA,Plymouth County
19151	IA,Pocahontas County
19153	IA,Polk County
19155	IA,Pottawattamie County
19157	IA,Poweshiek County
19159	IA,Ringgold County
19161	IA,Sac County
19163	IA,Scott County
19165	IA,Shelby County
19167	IA,Sioux County
19169	IA,Story County
19171	IA,Tama County
19173	IA,Taylor County
19175	IA,Union County
19177	IA,Van Buren County
19179	IA,Wapello County
19181	IA,Warren County
19183	IA,Washington County
19185	IA,Wayne County
19187	IA,Webster County
19189	IA,Winnebago County
19191	IA,Winneshiek County
19193	IA,Woodbury County
19195	IA,Worth County
19197	IA,Wright County
20001	KS,Allen County
20003	KS,Anderson County
46111	SD,Sanborn County
46113	SD,Shannon County
46115	SD,Spink County
46117	SD,Stanley County
46119	SD,Sully County
46121	SD,Todd County
46123	SD,Tripp County
46125	SD,Turner County
46127	SD,Union County
46129	SD,Walworth County
46135	SD,Yankton County
46137	SD,Ziebach County
46666	SD,Black Hills National Forest
47001	TN,Anderson County
47003	TN,Bedford County
47005	TN,Benton County
47007	TN,Bledsoe County
47009	TN,Blount County
47011	TN,Bradley County
47013	TN,Campbell County
47015	TN,Cannon County
47017	TN,Carroll County
47019	TN,Carter County
47021	TN,Cheatham County
47023	TN,Chester County
47025	TN,Claiborne County
47027	TN,Clay County
47029	TN,Cocke County
47031	TN,Coffee County
47033	TN,Crockett County
47035	TN,Cumberland County
47037	TN,Davidson County
47039	TN,Decatur County
47041	TN,DeKalb County
47043	TN,Dickson County
47045	TN,Dyer County
47047	TN,Fayette County
47049	TN,Fentress County
47051	TN,Franklin County
47053	TN,Gibson County
47055	TN,Giles County
47057	TN,Grainger County
47059	TN,Greene County
47061	TN,Grundy County
47063	TN,Hamblen County
47065	TN,Hamilton County
47067	TN,Hancock County
47069	TN,Hardeman County

RPA Data Wiz Name Access FIELD NAME	Definition
20005	KS,Atchison County
20007	KS,Barber County
20009	KS,Barton County
20011	KS,Bourbon County
20013	KS,Brown County
20015	KS,Butler County
20017	KS,Chase County
20019	KS,Chautauqua County
20021	KS,Cherokee County
20023	KS,Cheyenne County
20025	KS,Clark County
20027	KS,Clay County
20029	KS,Cloud County
20031	KS,Coffey County
20033	KS,Comanche County
20035	KS,Cowley County
20037	KS,Crawford County
20039	KS,Decatur County
20041	KS,Dickinson County
20043	KS,Doniphan County
20045	KS,Douglas County
20047	KS,Edwards County
20049	KS,Elk County
20051	KS,Ellis County
20053	KS,Ellsworth County
20055	KS,Finney County
20057	KS,Ford County
20059	KS,Franklin County
20061	KS,Geary County
20063	KS,Gove County
20065	KS,Graham County
20067	KS,Grant County
20069	KS,Gray County
20071	KS,Greeley County
20073	KS,Greenwood County
20075	KS,Hamilton County
20077	KS,Harper County
20079	KS,Harvey County
20081	KS,Haskell County
20083	KS,Hodgeman County
20085	KS,Jackson County
20087	KS,Jefferson County
20089	KS,Jewell County
20091	KS,Johnson County
20093	KS,Kearny County
20095	KS,Kingman County
20097	KS,Kiowa County
20099	KS,Labette County
47071	TN,Hardin County
47073	TN,Hawkins County
47075	TN,Haywood County
47077	TN,Henderson County
47079	TN,Henry County
47081	TN,Hickman County
47083	TN,Houston County
47085	TN,Humphreys County
47087	TN,Jackson County
47089	TN,Jefferson County
47091	TN,Johnson County
47093	TN,Knox County
47095	TN,Lake County
47097	TN,Lauderdale County
47099	TN,Lawrence County
47101	TN,Lewis County
47103	TN,Lincoln County
47105	TN,Loudon County
47107	TN,McMinn County
47109	TN,McNairy County
47111	TN,Macon County
47113	TN,Madison County
47115	TN,Marion County
47117	TN,Marshall County
47119	TN,Maury County
47121	TN,Meigs County
47123	TN,Monroe County
47125	TN,Montgomery County
47127	TN,Moore County
47129	TN,Morgan County
47131	TN,Obion County
47133	TN,Overton County
47135	TN,Perry County
47137	TN,Pickett County
47139	TN,Polk County
47141	TN,Putnam County
47143	TN,Rhea County
47145	TN,Roane County
47147	TN,Robertson County
47149	TN,Rutherford County
47151	TN,Scott County
47153	TN,Sequatchie County
47155	TN,Sevier County
47157	TN,Shelby County
47159	TN,Smith County
47161	TN,Stewart County
47163	TN,Sullivan County
47165	TN,Sumner County

RPA Data Wiz Name Access FIELD NAME	Definition
20101	KS,Lane County
20103	KS,Leavenworth County
20105	KS,Lincoln County
20107	KS,Linn County
20109	KS,Logan County
20111	KS,Lyon County
20113	KS,McPherson County
20115	KS,Marion County
20117	KS,Marshall County
20119	KS,Meade County
20121	KS,Miami County
20123	KS,Mitchell County
20125	KS,Montgomery County
20127	KS,Morris County
20129	KS,Morton County
20131	KS,Nemaha County
20133	KS,Neosho County
20135	KS,Ness County
20137	KS,Norton County
20139	KS,Osage County
20141	KS,Osborne County
20143	KS,Ottawa County
20145	KS,Pawnee County
20147	KS,Phillips County
20149	KS,Pottawatomie County
20151	KS,Pratt County
20153	KS,Rawlins County
20155	KS,Reno County
20157	KS,Republic County
20159	KS,Rice County
20161	KS,Riley County
20163	KS,Rooks County
20165	KS,Rush County
20167	KS,Russell County
20169	KS,Saline County
20171	KS,Scott County
20173	KS,Sedgwick County
20175	KS,Seward County
20177	KS,Shawnee County
20179	KS,Sheridan County
20181	KS,Sherman County
20183	KS,Smith County
20185	KS,Stafford County
20187	KS,Stanton County
20189	KS,Stevens County
20191	KS,Sumner County
20193	KS,Thomas County
20195	KS,Trego County
47167	TN,Tipton County
47169	TN,Trousdale County
47171	TN,Unicoi County
47173	TN,Union County
47175	TN,Van Buren County
47177	TN,Warren County
47179	TN,Washington County
47181	TN,Wayne County
47183	TN,Weakley County
47185	TN,White County
47187	TN,Williamson County
47189	TN,Wilson County
48001	TX,Anderson County
48003	TX,Andrews County
48005	TX,Angelina County
48007	TX,Aransas County
48009	TX,Archer County
48011	TX,Armstrong County
48013	TX,Atascosa County
48015	TX,Austin County
48017	TX,Bailey County
48019	TX,Bandera County
48021	TX,Bastrop County
48023	TX,Baylor County
48025	TX,Bee County
48027	TX,Bell County
48029	TX,Bexar County
48031	TX,Blanco County
48033	TX,Borden County
48035	TX,Bosque County
48037	TX,Bowie County
48039	TX,Brazoria County
48041	TX,Brazos County
48043	TX,Brewster County
48045	TX,Briscoe County
48047	TX,Brooks County
48049	TX,Brown County
48051	TX,Burleson County
48053	TX,Burnet County
48055	TX,Caldwell County
48057	TX,Calhoun County
48059	TX,Callahan County
48061	TX,Cameron County
48063	TX,Camp County
48065	TX,Carson County
48067	TX,Cass County
48069	TX,Castro County
48071	TX,Chambers County

RPA Data Wiz Name Access FIELD NAME	Definition
20197	KS,Wabaunsee County
20199	KS,Wallace County
20201	KS,Washington County
20203	KS,Wichita County
20205	KS,Wilson County
20207	KS,Woodson County
20209	KS,Wyandotte County
21001	KY,Adair County
21003	KY,Allen County
21005	KY,Anderson County
21007	KY,Ballard County
21009	KY,Barren County
21011	KY,Bath County
21013	KY,Bell County
21015	KY,Boone County
21017	KY,Bourbon County
21019	KY,Boyd County
21021	KY,Boyle County
21023	KY,Bracken County
21025	KY,Breathitt County
21027	KY,Breckinridge County
21029	KY,Bullitt County
21031	KY,Butler County
21033	KY,Caldwell County
21035	KY,Calloway County
21037	KY,Campbell County
21039	KY,Carlisle County
21041	KY,Carroll County
21043	KY,Carter County
21045	KY,Casey County
21047	KY,Christian County
21049	KY,Clark County
21051	KY,Clay County
21053	KY,Clinton County
21055	KY,Crittenden County
21057	KY,Cumberland County
21059	KY,Daviess County
21061	KY,Edmonson County
21063	KY,Elliott County
21065	KY,Estill County
21067	KY,Fayette County
21069	KY,Fleming County
21071	KY,Floyd County
21073	KY,Franklin County
21075	KY,Fulton County
21077	KY,Gallatin County
21079	KY,Garrard County
21081	KY,Grant County
48073	TX,Cherokee County
48075	TX,Childress County
48077	TX,Clay County
48079	TX,Cochran County
48081	TX,Coke County
48083	TX,Coleman County
48085	TX,Collin County
48087	TX,Collingsworth County
48089	TX,Colorado County
48091	TX,Comal County
48093	TX,Comanche County
48095	TX,Concho County
48097	TX,Cooke County
48099	TX,Coryell County
48101	TX,Cottle County
48103	TX,Crane County
48105	TX,Crockett County
48107	TX,Crosby County
48109	TX,Culberson County
48111	TX,Dallam County
48113	TX,Dallas County
48115	TX,Dawson County
48117	TX,Deaf Smith County
48119	TX,Delta County
48121	TX,Denton County
48123	TX,DeWitt County
48125	TX,Dickens County
48127	TX,Dimmit County
48129	TX,Donley County
48131	TX,Duval County
48133	TX,Eastland County
48135	TX,Ector County
48137	TX,Edwards County
48139	TX,Ellis County
48141	TX,El Paso County
48143	TX,Erath County
48145	TX,Falls County
48147	TX,Fannin County
48149	TX,Fayette County
48151	TX,Fisher County
48153	TX,Floyd County
48155	TX,Foard County
48157	TX,Fort Bend County
48159	TX,Franklin County
48161	TX,Freestone County
48163	TX,Frio County
48165	TX,Gaines County
48167	TX,Galveston County

RPA Data Wiz Name Access FIELD NAME	Definition
21083	KY,Graves County
21085	KY,Grayson County
21087	KY,Green County
21089	KY,Greenup County
21091	KY,Hancock County
21093	KY,Hardin County
21095	KY,Harlan County
21097	KY,Harrison County
21099	KY,Hart County
21101	KY,Henderson County
21103	KY,Henry County
21105	KY,Hickman County
21107	KY,Hopkins County
21109	KY,Jackson County
21111	KY,Jefferson County
21113	KY,Jessamine County
21115	KY,Johnson County
21117	KY,Kenton County
21119	KY,Knott County
21121	KY,Knox County
21123	KY,Larue County
21125	KY,Laurel County
21127	KY,Lawrence County
21129	KY,Lee County
21131	KY,Leslie County
21133	KY,Letcher County
21135	KY,Lewis County
21137	KY,Lincoln County
21139	KY,Livingston County
21141	KY,Logan County
21143	KY,Lyon County
21145	KY,McCracken County
21147	KY,McCreary County
21149	KY,McLean County
21151	KY,Madison County
21153	KY,Magoffin County
21155	KY,Marion County
21157	KY,Marshall County
21159	KY,Martin County
21161	KY,Mason County
21163	KY,Meade County
21165	KY,Menifee County
21167	KY,Mercer County
21169	KY,Metcalfe County
21171	KY,Monroe County
21173	KY,Montgomery County
21175	KY,Morgan County
21177	KY,Muhlenberg County
48169	TX,Garza County
48171	TX,Gillespie County
48173	TX,Glasscock County
48175	TX,Goliad County
48177	TX,Gonzales County
48179	TX,Gray County
48181	TX,Grayson County
48183	TX,Gregg County
48185	TX,Grimes County
48187	TX,Guadalupe County
48189	TX,Hale County
48191	TX,Hall County
48193	TX,Hamilton County
48195	TX,Hansford County
48197	TX,Hardeman County
48199	TX,Hardin County
48201	TX,Harris County
48203	TX,Harrison County
48205	TX,Hartley County
48207	TX,Haskell County
48209	TX,Hays County
48211	TX,Hemphill County
48213	TX,Henderson County
48215	TX,Hidalgo County
48217	TX,Hill County
48219	TX,Hockley County
48221	TX,Hood County
48223	TX,Hopkins County
48225	TX,Houston County
48227	TX,Howard County
48229	TX,Hudspeth County
48231	TX,Hunt County
48233	TX,Hutchinson County
48235	TX,Irion County
48237	TX,Jack County
48239	TX,Jackson County
48241	TX,Jasper County
48243	TX,Jeff Davis County
48245	TX,Jefferson County
48247	TX,Jim Hogg County
48249	TX,Jim Wells County
48251	TX,Johnson County
48253	TX,Jones County
48255	TX,Karnes County
48257	TX,Kaufman County
48259	TX,Kendall County
48261	TX,Kenedy County
48263	TX,Kent County

RPA Data Wiz Name Access FIELD NAME	Definition
21179	KY,Nelson County
21181	KY,Nicholas County
21183	KY,Ohio County
21185	KY,Oldham County
21187	KY,Owen County
21189	KY,Owsley County
21191	KY,Pendleton County
21193	KY,Perry County
21195	KY,Pike County
21197	KY,Powell County
21199	KY,Pulaski County
21201	KY,Robertson County
21203	KY,Rockcastle County
21205	KY,Rowan County
21207	KY,Russell County
21209	KY,Scott County
21211	KY,Shelby County
21213	KY,Simpson County
21215	KY,Spencer County
21217	KY,Taylor County
21219	KY,Todd County
21221	KY,Trigg County
21223	KY,Trimble County
21225	KY,Union County
21227	KY,Warren County
21229	KY,Washington County
21231	KY,Wayne County
21233	KY,Webster County
21235	KY,Whitley County
21237	KY,Wolfe County
21239	KY,Woodford County
22001	LA,Acadia Parish
22003	LA,Allen Parish
22005	LA,Ascension Parish
22007	LA,Assumption Parish
22009	LA,Avoyelles Parish
22011	LA,Beauregard Parish
22013	LA,Bienville Parish
22015	LA,Bossier Parish
22017	LA,Caddo Parish
22019	LA,Calcasieu Parish
22021	LA,Caldwell Parish
22023	LA,Cameron Parish
22025	LA,Catahoula Parish
22027	LA,Claiborne Parish
22029	LA,Concordia Parish
22031	LA,De Soto Parish
22033	LA,East Baton Rouge Parish
48265	TX,Kerr County
48267	TX,Kimble County
48269	TX,King County
48271	TX,Kinney County
48273	TX,Kleberg County
48275	TX,Knox County
48277	TX,Lamar County
48279	TX,Lamb County
48281	TX,Lampasas County
48283	TX,La Salle County
48285	TX,Lavaca County
48287	TX,Lee County
48289	TX,Leon County
48291	TX,Liberty County
48293	TX,Limestone County
48295	TX,Lipscomb County
48297	TX,Live Oak County
48299	TX,Llano County
48301	TX,Loving County
48303	TX,Lubbock County
48305	TX,Lynn County
48307	TX,McCulloch County
48309	TX,McLennan County
48311	TX,McMullen County
48313	TX,Madison County
48315	TX,Marion County
48317	TX,Martin County
48319	TX,Mason County
48321	TX,Matagorda County
48323	TX,Maverick County
48325	TX,Medina County
48327	TX,Menard County
48329	TX,Midland County
48331	TX,Milam County
48333	TX,Mills County
48335	TX,Mitchell County
48337	TX,Montague County
48339	TX,Montgomery County
48341	TX,Moore County
48343	TX,Morris County
48345	TX,Motley County
48347	TX,Nacogdoches County
48349	TX,Navarro County
48351	TX,Newton County
48353	TX,Nolan County
48355	TX,Nueces County
48357	TX,Ochiltree County
48359	TX,Oldham County

RPA Data Wiz Name Access FIELD NAME	Definition
22035	LA,East Carroll Parish
22037	LA,East Feliciana Parish
22039	LA,Evangeline Parish
22041	LA,Franklin Parish
22043	LA,Grant Parish
22045	LA,Iberia Parish
22047	LA,Iberville Parish
22049	LA,Jackson Parish
22051	LA,Jefferson Parish
22053	LA,Jefferson Davis Parish
22055	LA,Lafayette Parish
22057	LA,Lafourche Parish
22059	LA,La Salle Parish
22061	LA,Lincoln Parish
22063	LA,Livingston Parish
22065	LA,Madison Parish
22067	LA,Morehouse Parish
22069	LA,Natchitoches Parish
22071	LA,Orleans Parish
22073	LA,Ouachita Parish
22075	LA,Plaquemines Parish
22077	LA,Pointe Coupee Parish
22079	LA,Rapides Parish
22081	LA,Red River Parish
22083	LA,Richland Parish
22085	LA,Sabine Parish
22087	LA,St. Bernard Parish
22089	LA,St. Charles Parish
22091	LA,St. Helena Parish
22093	LA,St. James Parish
22095	LA,St. John the Baptist Parish
22097	LA,St. Landry Parish
22099	LA,St. Martin Parish
22101	LA,St. Mary Parish
22103	LA,St. Tammany Parish
22105	LA,Tangipahoa Parish
22107	LA,Tensas Parish
22109	LA,Terrebonne Parish
22111	LA,Union Parish
22113	LA,Vermilion Parish
22115	LA,Vernon Parish
22117	LA,Washington Parish
22119	LA,Webster Parish
22121	LA,West Baton Rouge Parish
22123	LA,West Carroll Parish
22125	LA,West Feliciana Parish
22127	LA,Winn Parish
23001	ME,Androscoggin County
48361	TX,Orange County
48363	TX,Palo Pinto County
48365	TX,Panola County
48367	TX,Parker County
48369	TX,Parmer County
48371	TX,Pecos County
48373	TX,Polk County
48375	TX,Potter County
48377	TX,Presidio County
48379	TX,Rains County
48381	TX,Randall County
48383	TX,Reagan County
48385	TX,Real County
48387	TX,Red River County
48389	TX,Reeves County
48391	TX,Refugio County
48393	TX,Roberts County
48395	TX,Robertson County
48397	TX,Rockwall County
48399	TX,Runnels County
48401	TX,Rusk County
48403	TX,Sabine County
48405	TX,San Augustine County
48407	TX,San Jacinto County
48409	TX,San Patricio County
48411	TX,San Saba County
48413	TX,Schleicher County
48415	TX,Scurry County
48417	TX,Shackelford County
48419	TX,Shelby County
48421	TX,Sherman County
48423	TX,Smith County
48425	TX,Somervell County
48427	TX,Starr County
48429	TX,Stephens County
48431	TX,Sterling County
48433	TX,Stonewall County
48435	TX,Sutton County
48437	TX,Swisher County
48439	TX,Tarrant County
48441	TX,Taylor County
48443	TX,Terrell County
48445	TX,Terry County
48447	TX,Throckmorton County
48449	TX,Titus County
48451	TX,Tom Green County
48453	TX,Travis County
48455	TX,Trinity County

RPA Data Wiz Name Access FIELD NAME	Definition
23003	ME,Aroostook County
23005	ME,Cumberland County
23007	ME,Franklin County
23009	ME,Hancock County
23011	ME,Kennebec County
23013	ME,Knox County
23015	ME,Lincoln County
23017	ME,Oxford County
23019	ME,Penobscot County
23021	ME,Piscataquis County
23023	ME,Sagadahoc County
23025	ME,Somerset County
23027	ME,Waldo County
23029	ME,Washington County
23031	ME,York County
24001	MD,Allegany County
24003	MD,Anne Arundel County
24005	MD,Baltimore County
24009	MD,Calvert County
24011	MD,Caroline County
24013	MD,Carroll County
24015	MD,Cecil County
24017	MD,Charles County
24019	MD,Dorchester County
24021	MD,Frederick County
24023	MD,Garrett County
24025	MD,Harford County
24027	MD,Howard County
24029	MD,Kent County
24031	MD,Montgomery County
24033	MD,Prince George's County
24035	MD,Queen Anne's County
24037	MD,St. Mary's County
24039	MD,Somerset County
24041	MD,Talbot County
24043	MD,Washington County
24045	MD,Wicomico County
24047	MD,Worcester County
24510	MD,Baltimore City
25001	MA,Barnstable County
25003	MA,Berkshire County
25005	MA,Bristol County
25007	MA,Dukes County
25009	MA,Essex County
25011	MA,Franklin County
25013	MA,Hampden County
25015	MA,Hampshire County
25017	MA,Middlesex County
48457	TX,Tyler County
48459	TX,Upshur County
48461	TX,Upton County
48463	TX,Uvalde County
48465	TX,Val Verde County
48467	TX,Van Zandt County
48469	TX,Victoria County
48471	TX,Walker County
48473	TX,Waller County
48475	TX,Ward County
48477	TX,Washington County
48479	TX,Webb County
48481	TX,Wharton County
48483	TX,Wheeler County
48485	TX,Wichita County
48487	TX,Wilbarger County
48489	TX,Willacy County
48491	TX,Williamson County
48493	TX,Wilson County
48495	TX,Winkler County
48497	TX,Wise County
48499	TX,Wood County
48501	TX,Yoakum County
48503	TX,Young County
48505	TX,Zapata County
48507	TX,Zavala County
49001	UT,Beaver County
49003	UT,Box Elder County
49005	UT,Cache County
49007	UT,Carbon County
49009	UT,Daggett County
49011	UT,Davis County
49013	UT,Duchesne County
49015	UT,Emery County
49017	UT,Garfield County
49019	UT,Grand County
49021	UT,Iron County
49023	UT,Juab County
49025	UT,Kane County
49027	UT,Millard County
49029	UT,Morgan County
49031	UT,Piute County
49033	UT,Rich County
49035	UT,Salt Lake County
49037	UT,San Juan County
49039	UT,Sanpete County
49041	UT,Sevier County
49043	UT,Summit County

RPA Data Wiz Name Access FIELD NAME	Definition
25019	MA,Nantucket County
25021	MA,Norfolk County
25023	MA,Plymouth County
25025	MA,Suffolk County
25027	MA,Worcester County
26001	MI,Alcona County
26003	MI,Alger County
26005	MI,Allegan County
26007	MI,Alpena County
26009	MI,Antrim County
26011	MI,Arenac County
26013	MI,Baraga County
26015	MI,Barry County
26017	MI,Bay County
26019	MI,Benzie County
26021	MI,Berrien County
26023	MI,Branch County
26025	MI,Calhoun County
26027	MI,Cass County
26029	MI,Charlevoix County
26031	MI,Cheboygan County
26033	MI,Chippewa County
26035	MI,Clare County
26037	MI,Clinton County
26039	MI,Crawford County
26041	MI,Delta County
26043	MI,Dickinson County
26045	MI,Eaton County
26047	MI,Emmet County
26049	MI,Genesee County
26051	MI,Gladwin County
26053	MI,Gogebic County
26055	MI,Grand Traverse County
26057	MI,Gratiot County
26059	MI,Hillsdale County
26061	MI,Houghton County
26063	MI,Huron County
26065	MI,Ingham County
26067	MI,Ionia County
26069	MI,Iosco County
26071	MI,Iron County
26073	MI,Isabella County
26075	MI,Jackson County
26077	MI,Kalamazoo County
26079	MI,Kalkaska County
26081	MI,Kent County
26083	MI,Keweenaw County
26085	MI,Lake County
49045	UT,Tooele County
49047	UT,Uintah County
49049	UT,Utah County
49051	UT,Wasatch County
49053	UT,Washington County
49055	UT,Wayne County
49057	UT,Weber County
50001	VT,Addison County
50003	VT,Bennington County
50005	VT,Caledonia County
50007	VT,Chittenden County
50009	VT,Essex County
50011	VT,Franklin County
50013	VT,Grand Isle County
50015	VT,Lamoille County
50017	VT,Orange County
50019	VT,Orleans County
50021	VT,Rutland County
50023	VT,Washington County
50025	VT,Windham County
50027	VT,Windsor County
51001	VA,Accomack County
51003	VA,Albemarle County
51005	VA,Alleghany County
51007	VA,Amelia County
51009	VA,Amherst County
51011	VA,Appomattox County
51013	VA,Arlington County
51015	VA,Augusta County
51017	VA,Bath County
51019	VA,Bedford County
51021	VA,Bland County
51023	VA,Botetourt County
51025	VA,Brunswick County
51027	VA,Buchanan County
51029	VA,Buckingham County
51031	VA,Campbell County
51033	VA,Caroline County
51035	VA,Carroll County
51036	VA,Charles City County
51037	VA,Charlotte County
51041	VA,Chesterfield County
51043	VA,Clarke County
51045	VA,Craig County
51047	VA,Culpeper County
51049	VA,Cumberland County
51051	VA,Dickenson County
51053	VA,Dinwiddie County

RPA Data Wiz Name Access FIELD NAME	Definition
26087	MI,Lapeer County
26089	MI,Leelanau County
26091	MI,Lenawee County
26093	MI,Livingston County
26095	MI,Luce County
26097	MI,Mackinac County
26099	MI,Macomb County
26101	MI,Manistee County
26103	MI,Marquette County
26105	MI,Mason County
26107	MI,Mecosta County
26109	MI,Menominee County
26111	MI,Midland County
26113	MI,Missaukee County
26115	MI,Monroe County
26117	MI,Montcalm County
26119	MI,Montmorency County
26121	MI,Muskegon County
26123	MI,Newaygo County
26125	MI,Oakland County
26127	MI,Oceana County
26129	MI,Ogemaw County
26131	MI,Ontonagon County
26133	MI,Osceola County
26135	MI,Oscoda County
26137	MI,Otsego County
26139	MI,Ottawa County
26141	MI,Presque Isle County
26143	MI,Roscommon County
26145	MI,Saginaw County
26147	MI,St. Clair County
26149	MI,St. Joseph County
26151	MI,Sanilac County
26153	MI,Schoolcraft County
26155	MI,Shiawassee County
26157	MI,Tuscola County
26159	MI,Van Buren County
26161	MI,Washtenaw County
26163	MI,Wayne County
26165	MI,Wexford County
27001	MN,Aitkin County
27003	MN,Anoka County
27005	MN,Becker County
27007	MN,Beltrami County
27009	MN,Benton County
27011	MN,Big Stone County
27013	MN,Blue Earth County
27015	MN,Brown County
51057	VA,Essex County
51059	VA,Fairfax County
51061	VA,Fauquier County
51063	VA,Floyd County
51065	VA,Fluvanna County
51067	VA,Franklin County
51069	VA,Frederick County
51071	VA,Giles County
51073	VA,Gloucester County
51075	VA,Goochland County
51077	VA,Grayson County
51079	VA,Greene County
51081	VA,Greensville County
51083	VA,Halifax County
51085	VA,Hanover County
51087	VA,Henrico County
51089	VA,Henry County
51091	VA,Highland County
51093	VA,Isle of Wight County
51095	VA,James City County
51097	VA,King and Queen County
51099	VA,King George County
51101	VA,King William County
51103	VA,Lancaster County
51105	VA,Lee County
51107	VA,Loudoun County
51109	VA,Louisa County
51111	VA,Lunenburg County
51113	VA,Madison County
51115	VA,Mathews County
51117	VA,Mecklenburg County
51119	VA,Middlesex County
51121	VA,Montgomery County
51125	VA,Nelson County
51127	VA,New Kent County
51131	VA,Northampton County
51133	VA,Northumberland County
51135	VA,Nottoway County
51137	VA,Orange County
51139	VA,Page County
51141	VA,Patrick County
51143	VA,Pittsylvania County
51145	VA,Powhatan County
51147	VA,Prince Edward County
51149	VA,Prince George County
51153	VA,Prince William County
51155	VA,Pulaski County
51157	VA,Rappahannock County

RPA Data Wiz Name Access FIELD NAME	Definition
27017	MN,Carlton County
27019	MN,Carver County
27021	MN,Cass County
27023	MN,Chippewa County
27025	MN,Chisago County
27027	MN,Clay County
27029	MN,Clearwater County
27031	MN,Cook County
27033	MN,Cottonwood County
27035	MN,Crow Wing County
27037	MN,Dakota County
27039	MN,Dodge County
27041	MN,Douglas County
27043	MN,Faribault County
27045	MN,Fillmore County
27047	MN,Freeborn County
27049	MN,Goodhue County
27051	MN,Grant County
27053	MN,Hennepin County
27055	MN,Houston County
27057	MN,Hubbard County
27059	MN,Isanti County
27061	MN,Itasca County
27063	MN,Jackson County
27065	MN,Kanabec County
27067	MN,Kandiyohi County
27069	MN,Kittson County
27071	MN,Koochiching County
27073	MN,Lac qui Parle County
27075	MN,Lake County
27077	MN,Lake of the Woods County
27079	MN,Le Sueur County
27081	MN,Lincoln County
27083	MN,Lyon County
27085	MN,McLeod County
27087	MN,Mahnomen County
27089	MN,Marshall County
27091	MN,Martin County
27093	MN,Meeker County
27095	MN,Mille Lacs County
27097	MN,Morrison County
27099	MN,Mower County
27101	MN,Murray County
27103	MN,Nicollet County
27105	MN,Nobles County
27107	MN,Norman County
27109	MN,Olmsted County
27111	MN,Otter Tail County
51159	VA,Richmond County
51161	VA,Roanoke County
51163	VA,Rockbridge County
51165	VA,Rockingham County
51167	VA,Russell County
51169	VA,Scott County
51171	VA,Shenandoah County
51173	VA,Smyth County
51175	VA,Southampton County
51177	VA,Spotsylvania County
51179	VA,Stafford County
51181	VA,Surry County
51183	VA,Sussex County
51185	VA,Tazewell County
51187	VA,Warren County
51191	VA,Washington County
51193	VA,Westmoreland County
51195	VA,Wise County
51197	VA,Wythe County
51199	VA,York County
51510	VA,Alexandria City
51515	VA,Bedford City
51520	VA,Bristol City
51530	VA,Buena Vista City
51540	VA,Charlottesville City
51550	VA,Chesapeake City
51560	VA,Clifton Forge City
51570	VA,Colonial Heights City
51580	VA,Covington City
51590	VA,Danville City
51595	VA,Emporia City
51600	VA,Fairfax City
51610	VA,Falls Church City
51620	VA,Franklin City
51630	VA,Fredericksburg City
51640	VA,Galax City
51650	VA,Hampton City
51660	VA,Harrisonburg City
51670	VA,Hopewell City
51678	VA,Lexington City
51680	VA,Lynchburg City
51683	VA,Manassas City
51685	VA,Manassas Park City
51690	VA,Martinsville City
51700	VA,Newport News City
51710	VA,Norfolk City
51720	VA,Norton City
51730	VA,Petersburg City

RPA Data Wiz Name Access FIELD NAME	Definition
27113	MN,Pennington County
27115	MN,Pine County
27117	MN,Pipestone County
27119	MN,Polk County
27121	MN,Pope County
27123	MN,Ramsey County
27125	MN,Red Lake County
27127	MN,Redwood County
27129	MN,Renville County
27131	MN,Rice County
27133	MN,Rock County
27135	MN,Roseau County
27137	MN,St. Louis County
27139	MN,Scott County
27141	MN,Sherburne County
27143	MN,Sibley County
27145	MN,Stearns County
27147	MN,Steele County
27149	MN,Stevens County
27151	MN,Swift County
27153	MN,Todd County
27155	MN,Traverse County
27157	MN,Wabasha County
27159	MN,Wadena County
27161	MN,Waseca County
27163	MN,Washington County
27165	MN,Watonwan County
27167	MN,Wilkin County
27169	MN,Winona County
27171	MN,Wright County
27173	MN,Yellow Medicine County
28001	MS,Adams County
28003	MS,Alcorn County
28005	MS,Amite County
28007	MS,Attala County
28009	MS,Benton County
28011	MS,Bolivar County
28013	MS,Calhoun County
28015	MS,Carroll County
28017	MS,Chickasaw County
28019	MS,Choctaw County
28021	MS,Claiborne County
28023	MS,Clarke County
28025	MS,Clay County
28027	MS,Coahoma County
28029	MS,Copiah County
28031	MS,Covington County
28033	MS,DeSoto County
51735	VA,Poquoson City
51740	VA,Portsmouth City
51750	VA,Radford City
51760	VA,Richmond City
51770	VA,Roanoke City
51775	VA,Salem City
51780	VA,South Boston City
51790	VA,Staunton City
51800	VA,Suffolk City
51810	VA,Virginia Beach City
51820	VA,Waynesboro City
51830	VA,Williamsburg City
51840	VA,Winchester City
53001	WA,Adams County
53003	WA,Asotin County
53005	WA,Benton County
53007	WA,Chelan County
53009	WA,Clallam County
53011	WA,Clark County
53013	WA,Columbia County
53015	WA,Cowlitz County
53017	WA,Douglas County
53019	WA,Ferry County
53021	WA,Franklin County
53023	WA,Garfield County
53025	WA,Grant County
53027	WA,Grays Harbor County
53029	WA,Island County
53031	WA,Jefferson County
53033	WA,King County
53035	WA,Kitsap County
53037	WA,Kittitas County
53039	WA,Klickitat County
53041	WA,Lewis County
53043	WA,Lincoln County
53045	WA,Mason County
53047	WA,Okanogan County
53049	WA,Pacific County
53051	WA,Pend Oreille County
53053	WA,Pierce County
53055	WA,San Juan County
53057	WA,Skagit County
53059	WA,Skamania County
53061	WA,Snohomish County
53063	WA,Spokane County
53065	WA,Stevens County
53067	WA,Thurston County
53069	WA,Wahkiakum County

RPA Data Wiz Name Access FIELD NAME	Definition
28035	MS,Forrest County
28037	MS,Franklin County
28039	MS,George County
28041	MS,Greene County
28043	MS,Grenada County
28045	MS,Hancock County
28047	MS,Harrison County
28049	MS,Hinds County
28051	MS,Holmes County
28053	MS,Humphreys County
28055	MS,Issaquena County
28057	MS,Itawamba County
28059	MS,Jackson County
28061	MS,Jasper County
28063	MS,Jefferson County
28065	MS,Jefferson Davis County
28067	MS,Jones County
28069	MS,Kemper County
28071	MS,Lafayette County
28073	MS,Lamar County
28075	MS,Lauderdale County
28077	MS,Lawrence County
28079	MS,Leake County
28081	MS,Lee County
28083	MS,Leflore County
28085	MS,Lincoln County
28087	MS,Lowndes County
28089	MS,Madison County
28091	MS,Marion County
28093	MS,Marshall County
28095	MS,Monroe County
28097	MS,Montgomery County
28099	MS,Neshoba County
28101	MS,Newton County
28103	MS,Noxubee County
28105	MS,Oktibbeha County
28107	MS,Panola County
28109	MS,Pearl River County
28111	MS,Perry County
28113	MS,Pike County
28115	MS,Pontotoc County
28117	MS,Prentiss County
28119	MS,Quitman County
28121	MS,Rankin County
28123	MS,Scott County
28125	MS,Sharkey County
28127	MS,Simpson County
28129	MS,Smith County
53071	WA,Walla Walla County
53073	WA,Whatcom County
53075	WA,Whitman County
53077	WA,Yakima County
53999	WA,Undetermined County
54001	WV,Barbour County
54003	WV,Berkeley County
54005	WV,Boone County
54007	WV,Braxton County
54009	WV,Brooke County
54011	WV,Cabell County
54013	WV,Calhoun County
54015	WV,Clay County
54017	WV,Doddridge County
54019	WV,Fayette County
54021	WV,Gilmer County
54023	WV,Grant County
54025	WV,Greenbrier County
54027	WV,Hampshire County
54029	WV,Hancock County
54031	WV,Hardy County
54033	WV,Harrison County
54035	WV,Jackson County
54037	WV,Jefferson County
54039	WV,Kanawha County
54041	WV,Lewis County
54043	WV,Lincoln County
54045	WV,Logan County
54047	WV,McDowell County
54049	WV,Marion County
54051	WV,Marshall County
54053	WV,Mason County
54055	WV,Mercer County
54057	WV,Mineral County
54059	WV,Mingo County
54061	WV,Monongalia County
54063	WV,Monroe County
54065	WV,Morgan County
54067	WV,Nicholas County
54069	WV,Ohio County
54071	WV,Pendleton County
54073	WV,Pleasants County
54075	WV,Pocahontas County
54077	WV,Preston County
54079	WV,Putnam County
54081	WV,Raleigh County
54083	WV,Randolph County
54085	WV,Ritchie County

RPA Data Wiz Name Access FIELD NAME	Definition
28131	MS,Stone County
28133	MS,Sunflower County
28135	MS,Tallahatchie County
28137	MS,Tate County
28139	MS,Tippah County
28141	MS,Tishomingo County
28143	MS,Tunica County
28145	MS,Union County
28147	MS,Walthall County
28149	MS,Warren County
28151	MS,Washington County
28153	MS,Wayne County
28155	MS,Webster County
28157	MS,Wilkinson County
28159	MS,Winston County
28161	MS,Yalobusha County
28163	MS,Yazoo County
29001	MO,Adair County
29003	MO,Andrew County
29005	MO,Atchison County
29007	MO,Audrain County
29009	MO,Barry County
29011	MO,Barton County
29013	MO,Bates County
29015	MO,Benton County
29017	MO,Bollinger County
29019	MO,Boone County
29021	MO,Buchanan County
29023	MO,Butler County
29025	MO,Caldwell County
29027	MO,Callaway County
29029	MO,Camden County
29031	MO,Cape Girardeau County
29033	MO,Carroll County
29035	MO,Carter County
29037	MO,Cass County
29039	MO,Cedar County
29041	MO,Chariton County
29043	MO,Christian County
29045	MO,Clark County
29047	MO,Clay County
29049	MO,Clinton County
29051	MO,Cole County
29053	MO,Cooper County
29055	MO,Crawford County
29057	MO,Dade County
29059	MO,Dallas County
29061	MO,Daviess County
54087	WV,Roane County
54089	WV,Summers County
54091	WV,Taylor County
54093	WV,Tucker County
54095	WV,Tyler County
54097	WV,Upshur County
54099	WV,Wayne County
54101	WV,Webster County
54103	WV,Wetzel County
54105	WV,Wirt County
54107	WV,Wood County
54109	WV,Wyoming County
55001	WI,Adams County
55003	WI,Ashland County
55005	WI,Barron County
55007	WI,Bayfield County
55009	WI,Brown County
55011	WI,Buffalo County
55013	WI,Burnett County
55015	WI,Calumet County
55017	WI,Chippewa County
55019	WI,Clark County
55021	WI,Columbia County
55023	WI,Crawford County
55025	WI,Dane County
55027	WI,Dodge County
55029	WI,Door County
55031	WI,Douglas County
55033	WI,Dunn County
55035	WI,Eau Claire County
55037	WI,Florence County
55039	WI,Fond du Lac County
55041	WI,Forest County
55043	WI,Grant County
55045	WI,Green County
55047	WI,Green Lake County
55049	WI,Iowa County
55051	WI,Iron County
55053	WI,Jackson County
55055	WI,Jefferson County
55057	WI,Juneau County
55059	WI,Kenosha County
55061	WI,Kewaunee County
55063	WI,La Crosse County
55065	WI,Lafayette County
55067	WI,Langlade County
55069	WI,Lincoln County
55071	WI,Manitowoc County

RPA Data Wiz Name Access FIELD NAME	Definition
29063	MO,DeKalb County
29065	MO,Dent County
29067	MO,Douglas County
29069	MO,Dunklin County
29071	MO,Franklin County
29073	MO,Gasconade County
29075	MO,Gentry County
29077	MO,Greene County
29079	MO,Grundy County
29081	MO,Harrison County
29083	MO,Henry County
29085	MO,Hickory County
29087	MO,Holt County
29089	MO,Howard County
29091	MO,Howell County
29093	MO,Iron County
29095	MO,Jackson County
29097	MO,Jasper County
29099	MO,Jefferson County
29101	MO,Johnson County
29103	MO,Knox County
29105	MO,Laclede County
29107	MO,Lafayette County
29109	MO,Lawrence County
29111	MO,Lewis County
29113	MO,Lincoln County
29115	MO,Linn County
29117	MO,Livingston County
29119	MO,McDonald County
29121	MO,Macon County
29123	MO,Madison County
29125	MO,Maries County
29127	MO,Marion County
29129	MO,Mercer County
29131	MO,Miller County
29133	MO,Mississippi County
29135	MO,Moniteau County
29137	MO,Monroe County
29139	MO,Montgomery County
29141	MO,Morgan County
29143	MO,New Madrid County
29145	MO,Newton County
29147	MO,Nodaway County
29149	MO,Oregon County
29151	MO,Osage County
29153	MO,Ozark County
29155	MO,Pemiscot County
29157	MO,Perry County
55073	WI,Marathon County
55075	WI,Marinette County
55077	WI,Marquette County
55078	WI,Menominee County
55079	WI,Milwaukee County
55081	WI,Monroe County
55083	WI,Oconto County
55085	WI,Oneida County
55087	WI,Outagamie County
55089	WI,Ozaukee County
55091	WI,Pepin County
55093	WI,Pierce County
55095	WI,Polk County
55097	WI,Portage County
55099	WI,Price County
55101	WI,Racine County
55103	WI,Richland County
55105	WI,Rock County
55107	WI,Rusk County
55109	WI,St. Croix County
55111	WI,Sauk County
55113	WI,Sawyer County
55115	WI,Shawano County
55117	WI,Sheboygan County
55119	WI,Taylor County
55121	WI,Trempealeau County
55123	WI,Vernon County
55125	WI,Vilas County
55127	WI,Walworth County
55129	WI,Washburn County
55131	WI,Washington County
55133	WI,Waukesha County
55135	WI,Waupaca County
55137	WI,Waushara County
55139	WI,Winnebago County
55141	WI,Wood County
56001	WY,Albany County
56003	WY,Big Horn County
56005	WY,Campbell County
56007	WY,Carbon County
56009	WY,Converse County
56011	WY,Crook County
56013	WY,Fremont County
56015	WY,Goshen County
56017	WY,Hot Springs County
56019	WY,Johnson County
56021	WY,Laramie County
56023	WY,Lincoln County

29159	MO,Pettis County	56025	WY,Natrona County
29161	MO,Phelps County	56027	WY,Niobrara County
29163	MO,Pike County	56029	WY,Park County
29165	MO,Platte County	56031	WY,Platte County
29167	MO,Polk County	56033	WY,Sheridan County
29169	MO,Pulaski County	56035	WY,Sublette County
29171	MO,Putnam County	56037	WY,Sweetwater County
29173	MO,Ralls County	56039	WY,Teton County
29175	MO,Randolph County	56041	WY,Uinta County
29177	MO,Ray County	56043	WY,Washakie County
29179	MO,Reynolds County	56045	WY,Weston County
29181	MO,Ripley County	56660	WY,Big Horn National Forest
29183	MO,St. Charles County	56661	WY,Black Hills National Forest
29185	MO,St. Clair County	56662	WY,Medicine Bow National Forest
29186	MO,Ste. Genevieve County	56663	WY,Shoshone National Forest
29187	MO,St. Francois County	56666	WY,Bridger-Teton National Forest
29189	MO,St. Louis County	56999	WY,Undetermined County
29195	MO,Saline County	999999	All U.S. Counties
29197	MO,Schuyler County		
29199	MO,Scotland County		
29201	MO,Scott County		
29203	MO,Shannon County		
29205	MO,Shelby County		
29207	MO,Stoddard County		
29209	MO,Stone County		

7. Subregion
SUBREGION

The subregion code indicates geographic location (east or west) within four States (Alaska, Oregon, South Dakota, and Washington).

Code	Subregion
-1	Missing
1	No Subregion
2	East
3	West

8. RPA Assessment Region
RPA_REGION

RPA region. Grouping of States into four regions for reporting purposes.

Code	Region
1	North Assessment Region: Composed of the Northeast and North Central RPA Assessment Subregions.
2	South Assessment Region: Composed of the Southeast and South Central RPA Assessment Subregions.
3	Rocky Mountains Assessment Region: Composed of the Great Plains and Intermountain RPA Assessment Subregions.
4	Pacific Coast Assessment Region: Composed of the Pacific Northwest, Pacific Southwest, and Alaska RPA Assessment Subregions.

RPA Data Wiz Name Access FIELD NAME	Definition

9. RPA Assessment Subregion
RPA_SUBREGION

RPA subregions. Grouping of States into nine subregions for reporting purposes. Subregions 1 and 2 belong in the Northern Region; subregions 3 and 4 belong in the Southern Region; subregions 5 and 6 belong in the Rocky Mountain Region; and subregions 7, 8, and 9 belong in the Pacific Coast Region.

Code	RPA Subregion
1	Northeast Assessment Subregion: Composed of CT, DE, District of Columbia, MA, MD, ME, NH, NJ, NY, PA, RI, VT, and WV.
2	North Central Assessment Subregion: Composed of IA, IL, IN, MI, MN, MO, OH, and WI.
3	Southeast Assessment Subregion: Composed of FL, GA, NC, SC, and VA.
4	South Central Assessment Subregion: Composed of AL, AR, KY, LA, MS, OK, TN, and TX.
5	Great Plains Assessment Subregion: Composed of KS, NB, ND, and SD.
6	Intermountain Assessment Subregion: Composed of AZ, CO, ID, MT, NM, NV, UT, and WY.
7	Alaska Assessment Subregion: Composed of AK.
8	Pacific Northwest Assessment Subregion: Composed of OR and WA.
9	Pacific Southwest Assessment Subregion: Composed of CA.

10. *Administrative Forest ADMINFORU and ADMINFOR from RPA database modified to ADMINFORU in RPA Data Wiz database

A combined administrative unit-administrative forest code. The field name for the USDA Forest Service administrative unit code in the RPA database is ADMINFORU. In the RPA database, the field name for the administrative forest within a specific unit is ADMINFOR. The RPA Data Wiz field, ADMINFORU, is a combination of the two previous RPA database fields ((ADMINFORU * 100) + ADMINFOR). This code identifies the polygons in the usfs shapefile used in RPA Data Wiz to map lands administered by the USDA Forest Service. The usfs shapefile is a combination of the Automated Lands Project, Federal Lands and Indian Reservations of the United States (National Atlas Program), and the USFS Region 5 Administrative Boundaries maps. See the metadata associated with the usfs shapefile metadata (usfs.met or usfs.shp.xml located in the application directory) and the references directory on the installation CD for more information.

Code	Administrative Forest
-1	Missing
102	Beaverhead-Deerlodge
103	Bitterroot
104	Idaho Panhandle
105	Clearwater
108	Custer
110	Flathead
111	Gallatin
112	Helena
114	Kootenai
115	Lewis and Clark
116	Lolo
117	Nez Perce
120	Cedar River National Grassland
121	Little Missouri National Grassland
122	Sheyenne National Grassland
124	Grand River National Grassland
199	Other NFS Areas - Region 1
202	Bighorn
203	Black Hills

RPA Data Wiz Name Access FIELD NAME	Definition
204	Grand Mesa-Uncomp-Gunnison
206	Medicine Bow-Routt
207	Nebraska
209	Rio Grande
210	Arapaho-Roosevelt
212	Pike and San Isabel
213	San Juan
214	Shosone
215	White River
217	Cimarron National Grassland
218	Comanche National Grassland
219	Pawnee National Grassland
220	Oglala National Grassland
221	Buffalo Gap National Grassland
222	Fort Pierre National Grassland
223	Thunder Basin National Grassland
299	Other NFS Areas - Region 2
301	Apache-Sitgreaves
302	Carson
303	Cibola
304	Coconino
305	Coronado
306	Gila
307	Kaibab
308	Lincoln
309	Prescott
310	Santa Fe
312	Tonto
399	Other NFS Areas - Region 3
401	Ashley
402	Boise
403	Bridger-Teton
405	Caribou
407	Dixie
408	Fishlake
409	Humboldt-Toiyabe
410	Manti-LaSal
412	Payette
413	Salmon-Challis
414	Sawtooth
415	Targhee
418	Uinta
419	Wasatch-Cache
420	Desert Range Experiment Station
499	Other NFS Areas - Region 4
501	Angeles
502	Cleveland
503	Eldorado

RPA Data Wiz Name Access FIELD NAME	Definition
504	Inyo
505	Klamath
506	Lassen
507	Los Padres
508	Mendocino
509	Modoc
510	Six Rivers
511	Plumas
512	San Bernardino
513	Sequoia
514	Shasta-Trinity
515	Sierra
516	Stanislaus
517	Tahoe
519	Lake Tahoe Basin
599	Other NFS Areas - Region 5
601	Deschutes
602	Fremont
603	Gifford Pinchot
604	Malheur
605	Mt. Baker-Snoqualmie
606	Mt. Hood
607	Ochoco
608	Okanogan
609	Olympic
610	Rogue River
611	Siskiyou
612	Siuslaw
614	Umatilla
615	Umpqua
616	Wallowa-Whitman
617	Wenatchee
618	Willamette
620	Winema
621	Colville
699	Other NFS Areas - Region 6
708	Bureau of Land Management - 708
709	Bureau of Land Management - 709
710	Bureau of Land Management - 710
711	Bureau of Land Management - 711
712	Bureau of Land Management - 712
801	NFS in Alabama
802	Daniel Boone
803	Chattahoochee-Oconee
804	Cherokee
805	NFS in Florida
806	Kisatchie
807	NFS in Mississippi

RPA Data Wiz Name Access FIELD NAME	Definition

808	George Washington-Jefferson
809	Ouachita
810	Ozark-St. Francis
811	NFS in North Carolina
812	Francis Marion-Sumter
813	NFS in Texas
816	Caribbean
899	Other NFS Areas - Region 8
902	Chequamegon-Nicolet
903	Chippewa
904	Huron-Manistee
905	Mark Twain
907	Ottawa
908	Shawnee
909	Superior
910	Hiawatha
911	Hoosier
918	Wayne
919	Allegheny
920	Green Mountain-Finger Lakes
921	Monongahela
922	White Mountain
999	Other NFS Areas - Region 9
1002	Tongass
1004	Chugach
1099	Other NFS Areas - Region 10

11. Land Cover Class
LANDCC

Land use code.

Code	Land Use
-1	Missing
20	Forest land: Land at least 10 percent stocked with forest trees of any size or formerly forested lands not currently developed for nonforest uses. These lands must be a minimum of 1 acre in area. Roadside, streamside, and shelterbelt strips of timber must have a crown width of at least 120 feet to qualify as forest land. Unimproved roads, trails, streams, and clearings within forest areas are classified as forest land if they are less than 120 feet wide.
60	Nonforest land: Land that has never supported forests or land formerly forested but now developed for other uses. If located within forest areas, then unimproved roads and nonforested strips must be more than 120 feet wide. Clearings must be more than 1 acre to qualify as nonforest land. Nonforest land includes areas used for crops, pasture, residential, commercial, industrial, city parks, improved roads, and adjoining clearings.
91	Census water: Streams, sloughs, estuaries, and canals more than 200 feet wide. Lakes, reservoirs, and ponds more than 4.5 acres in size. Exceptions occur for Alaska, Oregon, and Washington. The exceptions use the 1980 definition: Streams, sloughs, estuaries, and canals more than 1/8 of a statute mile (660 feet) in width. Lakes, reservoirs, and ponds more than 40 acres in size.

92 Noncensus water: Streams, sloughs, estuaries, and canals between 120 feet and 200 feet wide. Lakes, reservoirs, and ponds 1 to 4.5 acres in size. Exceptions occur for Alaska, Oregon, and Washington. The exceptions use the 1980 definition: Streams, sloughs, estuaries, and canals more than 120 feet and less than 1/8 of a mile (660 feet) in width. Lakes, reservoirs, and ponds 1 to 40 acres in size.

12. Reserved Class
RESERCLASS

Reserved Class.

Code	Reserve Class
-1	Missing
0	Unknown
1	Unreserved forest land: All private forest lands and public forest lands where the harvest of trees is not prohibited by statute or administrative regulation.
2	Non-National Forest System reserved forest land: Lands that have statutory or administrative restrictions prohibiting the harvest of trees. Examples include forest land within national parks, monuments, National Wilderness Preservation System areas outside the national forests, and State parks.
3	National Forest System reserved forest land-nonwilderness: National Forest System forest lands that have restrictions prohibiting the harvest of trees. Examples include primitive areas, scenic research areas, scenic areas, wild and scenic rivers, recreation areas, game refuges, monument areas, and historic areas. In general, this code includes all reserved or withdrawn National Forest System forest lands not within the National Wilderness Preservation System.
4	National Forest System reserved forest land-wilderness: Public forest lands that have statutory or administrative restrictions prohibiting the harvest of trees. Examples include land within the National Wilderness Preservation System or State-designated wilderness areas.

13. Site Productivity Class
SPCLASS

Site productivity class. A classification of forest land in terms of inherent capacity to grow crops of industrial wood. The class identifies the average potential growth in cubic feet/acre/year (English) or in cubic meters/hectare/year (metric) and is based on the culmination of mean annual increment of fully stocked natural stands.

English Version		Metric Version	
Code	Site Productivity	Code	Site Productivity
-1	Missing	-1	Missing
0	Unknown	0	Unknown
1	225-999 cubic feet/acre/year	1	15.7+ cubic meters/hectare/year
2	165-224 cubic feet/acre/year	2	11.5-15.6 cubic meters/hectare/year
3	120-164 cubic feet/acre/year	3	8.4-11.4 cubic meters/hectare/year
4	85-119 cubic feet/acre/year	4	5.9-8.3 cubic meters/hectare/year
5	50-84 cubic feet/acre/year	5	3.5-5.8 cubic meters/hectare/year
6	20-49 cubic feet/acre/year	6	1.4-3.4 cubic meters/hectare/year
7	< 20 cubic feet/acre/year	7	< 1.4 cubic meters/hectare/year
8	Unproductive timberland	8	Unproductive timberland

RPA Data Wiz Name Access FIELD NAME	Definition

14. Forested Land Code
FORCODE

Forest land code. Differentiates between productive/unproductive and reserved/nonreserved forest land.

Code	Forest Land
-1	Missing
0	Nonforest
1	Productive nonreserved forest land (timberland)
2	Productive reserved forest land
3	Unproductive nonreserved forest land
4	Unproductive reserved forest land

15. *Owner Group
OWNGROUP

Ownership group. A broad grouping of ownership classes.

Code	Owner Group
-1	Missing
1	National Forest land: Federal lands designated by executive order or statute as national forests or purchase units, and other lands under the administration of the U.S. Forest Service including experimental areas and Bankhead-Jones title III lands.
2	Other public land: publicly owned lands other than national forest lands.
3	Private land: All private lands.
9	Unknown ownership: Owner group not recorded. This code is legal for nonforest land and water cover classes only.

16. *Owner
OWNER

Owner class code. Indicates the class in which the landowner (at the time of the inventory) belongs.

Code	Owner
-1	Missing
11	National Forest
12	Bureau of Land Management: Federal lands administered by the Bureau of Land Management, U.S. Department of the Interior.
14	Other Federal agencies: Federal lands other than lands administered by the USDA Forest Service or BLM.
15	State: Lands owned by State governments or lands leased by State governmental units for more than 50 years.
16	County and municipal: Lands owned by county or municipal agencies, or lands leased by these agencies for more than 50 years.
20	Private: All private lands.
99	Unknown: Ownership not recorded or unavailable. This code is legal for nonforest land and water.

RPA Data Wiz Name Access FIELD NAME	Definition

17. *Forest Type Group
FORTYPE

Forest type group. The general forest-cover type of the inventoried stand based on the tree species forming a plurality of the stocking within the stand. This is a three-digit coded element where the first digit (1 or 2) represents either eastern or western type groups. The next 2 digits have been taken from a standard set of forest type codes.

Code	Forest Type
-1	Missing
0	Unknown
100	White - Red - Jack Pine
110	Spruce - Fir (East)
120	Longleaf - Slash Pine
130	Loblolly - Shortleaf Pine
140	Oak - Pine (East)
150	Oak - Hickory
160	Oak - Gum - Cypress
170	Elm - Ash - Cottonwood (East)
180	Maple - Beech - Birch
190	Aspen - Birch (East)
198	Other Forest Types (East)
199	Nonstocked (East)
200	Douglas-fir
210	Ponderosa Pine
220	Western White Pine
230	Fir - Spruce (West)
240	Hemlock - Sitka Spruce
250	Larch (West)
260	Lodgepole Pine
270	Redwood
280	Other Hardwoods (West)
290	Unclassified and Other Forest Types (West)
293	Pinyon - Juniper
297	Chaparral
299	Nonstocked (West)

18. Local Forest Type
LOCALTYPE

Local forest type. For the data derived from the Forest Inventory and Analysis Database (every State except Hawaii and interior Alaska; i.e., SUBREGION=3), local forest type is simply the value of FORTYPCD in the CONDITION record of the FIADB.

Code	Local Forest Type
-1	Missing
0	Unknown
100	White - Red - Jack Pine Group
101	Jack Pine
102	Red Pine
103	Eastern White Pine
104	Eastern White Pine - Hemlock
105	Eastern Hemlock

RPA Data Wiz Name Access FIELD NAME	Definition
106	Scotch Pine
110	Spruce - Fir Group (East)
111	Balsam Fir
112	Black Spruce
113	Red Spruce - Balsam Fir
114	Northern White-cedar
115	Tamarack
116	White Spruce
120	Longleaf - Slash Pine Group
121	Longleaf Pine
122	Slash Pine
130	Loblolly - Shortleaf Pine Group
131	Loblolly Pine
132	Shortleaf Pine
133	Virginia Pine
134	Sand Pine
135	Eastern Redcedar
136	Pond Pine
137	Spruce Pine
138	Pitch Pine
139	Table-mountain Pine
140	Oak - Pine Group (East)
141	White Pine - Northern Red Oak - White Ash (East)
142	Eastern Redcedar - Hardwood
143	Longleaf Pine - Scrub Oak
144	Shortleaf Pine - Oak
145	Virginia Pine - Southern Red Oak
146	Loblolly Pine - Hardwood
147	Slash Pine - Hardwood
149	Other Oak - Pine (East)
150	Oak - Hickory Group
151	Post Oak, Black Oak, or Bear Oak
152	Chestnut Oak
153	White Oak - Red Oak - Hickory
154	White Oak
155	Northern Red Oak
156	Yellow Poplar - White Oak - Northern Red Oak
157	Southern Scrub Oak
158	Sweetgum - Yellow Poplar
159	Mixed Hardwoods (East)
160	Oak - Gum - Cypress Group
161	Swamp Chestnut Oak - Cherrybark Oak
162	Sweetgum - Nuttall Oak - Willow Oak
163	Sugarberry - American Elm - Green Ash
165	Overcup Oak - Water Hickory
166	Atlantic White-cedar
167	Baldcypress - Water Tupelo
168	Sweetbay - Swamp Tupelo - Red Maple

RPA Data Wiz Name Access FIELD NAME	Definition
169	Palm - Mangrove - Other Tropical
170	Elm - Ash - Cottonwood Group (East)
171	Black Ash - American Elm - Red Maple (East)
172	River Birch - Sycamore
173	Cottonwood (East)
174	Willow (East)
175	Sycamore - Pecan - American Elm (East)
176	Red Maple - Lowland (East)
179	Mixed Lowland Hardwoods (East)
180	Maple - Beech - Birch Group
181	Sugar Maple - Beech - Yellow Birch
182	Black Cherry
183	Black Walnut
184	Red Maple - Northern Hardwoods
187	Red Maple - Upland (East)
188	Northern Hardwoods - Reverting Field
189	Mixed Northern Hardwoods
190	Aspen - Birch Group (East)
191	Aspen (East)
192	Paper Birch
194	Balsam Poplar
198	Other Forest Types (East)
199	Nonstocked (East)
200	Douglas-fir Group
201	Douglas-fir
202	Douglas-fir - Western Hemlock
203	Port Orford-cedar - Douglas-fir
210	Ponderosa Pine Group
211	Ponderosa Pine
212	Jeffrey Pine
213	Ponderosa Pine - Sugar Pine - Fir
220	Western White Pine Group
221	Western White Pine
230	Fir - Spruce Group (West)
231	White Fir - Grand Fir
232	Red Fir
234	Pacific Silver Fir - Hemlock
235	Engelmann Spruce
236	Engelmann Spruce - Subalpine Fir
240	Hemlock - Sitka Spruce Group
241	Western Redcedar
242	Sitka Spruce
247	Mountain Hemlock - Subalpine Fir
248	Western Hemlock
249	Alaska Cedar
250	Larch Group
255	Larch - Douglas-fir
256	Grand Fir - Larch - Douglas-fir

257	Ponderosa Pine - Larch - Douglas-fir
260	Lodgepole Pine Group
261	Lodgepole Pine
270	Redwood Group
271	Redwood
280	Other Hardwoods Group (West)
281	Red Alder
282	Poplar - Birch (West)
283	Aspen (West)
284	California Black Oak
285	Cottonwood - Willow (West)
286	Canyon Live Oak
287	Oak - Madrone
288	Other Oaks (West)
289	Ohia
290	Other Forest Types (Arizona cypress - western juniper)
291	Coulter Pine
292	Digger Pine - Oak
293	Pinyon - Juniper
294	Knobcone Pine
295	Bristlecone Pine
296	Whitebark Pine
297	Chaparral
298	Limber Pine
299	Nonstocked (West)

19. Stand Origin
STANDORIGIN

Stand origin code. Method of stand regeneration. An artificially regenerated stand is established by planting or artificial seeding.

Code	Stand origin
-1	Missing
0	Unknown
1	Natural stands
2	Clear evidence of artificial regeneration

20. Stand-Size Class
SSCLASS

Stand-size class code (derived by algorithm). A classification of the predominant (based on stocking) diameter class of live trees within the condition. Large-diameter trees are at least 11.0 inches (27.9 cm) diameter for hardwoods and at least 9.0 inches (22.9 cm) diameter for softwoods. Medium-diameter trees are at least 5.0 inches (12.7 cm) diameter but not as large as large-diameter trees. Small-diameter trees are less than 5.0 inches (12.7 cm) diameter.

Code	Stand-size class
-1	Missing
0	Unknown
1	Nonstocked: Forest land with all live stocking less than 10 percent

RPA Data Wiz Name Access FIELD NAME	Definition

2	Small diameter: Stands with an all live stocking value of at least 10 percent (base 100) on which at least 50 percent of the stocking is in small-diameter trees
3	Medium diameter: Stands with an all live stocking of at least 10 percent (base 100) with more than 50 percent of the stocking in medium- and large-diameter trees and with the stocking of large-diameter trees less than the stocking of medium-diameter trees
4	Large diameter: Stands with an all live stocking of at least 10 percent (base 100) with more than 50 percent of the stocking in medium- and large-diameter trees equal to or greater than the stocking of medium-diameter trees

21. *Ageclass
AGECLASS

Stand age. In RPA Data Wiz, the average total age, to the nearest 5 years, of the trees (plurality of all live trees not overtopped) in the predominant stand-size class of the condition, determined using local procedures. Age is difficult to measure and therefore stand age may have large measurement errors. Nonstocked stands are recorded as 0. Any inventory dated 1995 or later contains stand ages recorded to the nearest year, but these were recoded to the nearest 5 years (required for RPA Data Wiz). For some older inventories, stand age was recorded using intervals of 10 or 20 years (CT, DE, KY, MD, NH, PA, RI, VT, and WV) for stands < 100 years old, 20-year age classes for stands between 100 and 200 years, and 100-year age classes if older than 200 years. The value recorded is the midpoint of the age class. Mixed age classes were allowed in older inventories (AR, CT, KY, LA, ME, MA, MS, NH, NY, OH, OK, PA, RI, TX, VT, and WV) and were assigned a coded value of -999.

22. Percent Stocking Class
STOCKPC

Percent stocking class. A coded value indicating the percent stocking class for growing stock in the stand. The 10 percent interval classes range from nonstocked to 100 percent stocking, relative stocking basis. All 10 of these codes were used for Hawaii and interior Alaska. Only codes 1, 3, 5, 7, 9, and –1 were used for the other 48 States (the STOCKPC data for these States came from the GSSTKCD variable in the FIADB, which has fewer classes than STOCKPC). For the other 48 States, a code of 1 is equivalent to Nonstocked, 3 equals Poorly Stocked, 5 equals Medium Stocked, 7 equals Fully Stocked, 9 equals Overstocked, and –1 equals Missing.

Code	Percent Stocking
-1	Missing
0	Unknown
1	0 - 9% or Nonstocked
2	10 - 19%
3	20 - 29% or Poorly Stocked
4	30 - 39%
5	40 - 49% or Medium Stocked
6	50 - 59%
7	60 - 69% or Fully Stocked
8	70 - 79%
9	80 - 89% or Overstocked
10	90 - 100%

RPA Data Wiz Name Access FIELD NAME	Definition

23. Treatment Opportunity Class
TREATOPP

Treatment opportunity class code. Identifies the physical opportunity to improve stand conditions by applying management practices. Determined only for timberland (SITECLCD 1-6). This variable is mandatory for nonindustrial private lands and may not be available for other ownerships.

Code	Treatment Opportunity Class
-1	Not available/unclassified
0	Unknown
1	Regeneration without site preparation: The area is characterized by the absence of a manageable stand because of inadequate stocking of growing stock. Growth will be much below the potential for the site if the area is left alone. Prospects are not good for natural regeneration. Artificial regeneration will require little or no site preparation.
2	Regeneration with site preparation: The area is characterized by the absence of a manageable stand because of inadequate stocking of growing stock. Growth will be much below the potential for the site if the area is left alone. Either natural or artificial regeneration will require site preparation.
3	Stand conversion: The area is characterized by stands of undesirable, chronically diseased, or off-site (found where not normally expected) species. Growth and quality will be much below the potential for the site if the area is left alone. The best prospect is for conversion to a different forest type or species.
4	Thinning seedlings and saplings: The stand is characterized by a dense stocking of growing stock. Stagnation appears likely if left alone. Stocking must be reduced to help crop trees attain dominance.
5	Thinning poletimber: The stand is characterized by a dense stocking of growing stock. Stocking must be reduced to prevent stagnation or to confine growth to selected, high-quality crop trees.
6	Other stocking control: The stand is characterized by an adequate stocking of seedlings, saplings, and poletimber growing stock, mixed with competing vegetation either overtopping or otherwise inhibiting the development of crop trees. The undesirable material must be removed to release overtopped trees, to prevent stagnation, or to improve composition, form, or growth of the residual stand.
7	Other intermediate treatments: The stand would benefit from other special treatments, such as fertilization, to improve the growth potential of the site, and pruning to improve the quality of individual crop trees.
8	Clearcut harvest: The area is characterized by a mature or over-mature sawtimber stand of sufficient volume to justify a commercial harvest. The best prospect is to harvest the stand and regenerate.
9	Partial cut harvest: The stand is characterized by poletimber- or sawtimber-size trees with sufficient merchantable volume for a commercial harvest that will meet intermediate stand treatment needs or prepare the stand for natural regeneration. The stand has a favored species composition and may be even- or uneven-aged. Included are such treatments as commercial thinning, seed tree, or shelterwood regeneration and use of the selection system to maintain an uneven-age stand.
10	Salvage harvest: The stand is characterized by excessive damage to merchantable timber because of fire, insects, disease, wind, ice, or other destructive agents. The best prospect is to remove damaged or threatened material.
11	No treatment: No silvicultural treatment is needed.

RPA Data Wiz Name Access FIELD NAME	Definition

24. Observed - Modeled Data Source
TSOURCE

Source of volume data. Identifies whether the data source for volume records (trees, stands, etc.) is based on observed or modeled tree d.b.h. ECOSUBCD is the code for ecosubsection (Miles and Vissage, In prep.).

Code	Source
-1	Missing
0	Nonforestland.
1	Observed from tree data (all timberland plots are based on observed tree data).
2	Used for unproductive forest land and/or reserved forest land plots where no tree data are available. Plots with a value of 2 for TSOURCE have imputed values for the following variables: cubic, cubicsw, cubichw, cullsw, cullhw, cull, deadsw, deadhw, dead, biobolesw, biobolehw, biobole, biosapssw, biosapshw, biosaps. These variables were assigned the average values from similar plots (unproductive plots were matched with unproductive plots and reserved plots were matched with reserved plots where the plots had the same first two characters for the ECOSUBCD variable). A minimum of five plots having the same ECOSUBCD string through two characters was required for the plot to be assigned a TSOURCE code of 2. This plot failed the requirements to receive a TSOURCE code of 3.
3	Used for unproductive forest land and/or reserved forest land plots where no tree data are available. Plots with a value of 3 for TSOURCE have imputed values for the following variables: cubic, cubicsw, cubichw, cullsw, cullhw, cull, deadsw, deadhw, dead, biobolesw, biobolehw, biobole, biosapssw, biosapshw, biosaps. These variables were assigned the average values from similar plots (unproductive plots were matched with unproductive plots and reserved plots were matched with reserved plots where the plots had the same first three characters for the ECOSUBCD variable). A minimum of five plots having the same ECOSUBCD string through three characters was required for the plot to be assigned a TSOURCE code of 3. This plot failed the requirements to receive a TSOURCE code of 4.
4	Used for unproductive forest land and/or reserved forest land plots where no tree data are available. Plots with a value of 4 for TSOURCE have imputed values for the following variables: cubic, cubicsw, cubichw, cullsw, cullhw, cull, deadsw, deadhw, dead, biobolesw, biobolehw, biobole, biosapssw, biosapshw, biosaps. These variables were assigned the average values from similar plots (unproductive plots were matched with unproductive plots and reserved plots were matched with reserved plots where the plots had the same first four characters for the ECOSUBCD variable). A minimum of five plots having the same ECOSUBCD string through four characters was required for the plot to be assigned a TSOURCE code of 4. This plot failed the requirements to receive a TSOURCE code of 5.
5	Used for unproductive forest land and/or reserved forest land plots where no tree data are available. Plots with a value of 5 for TSOURCE have imputed values for the following variables: cubic, cubicsw, cubichw, cullsw, cullhw, cull, deadsw, deadhw, dead, biobolesw, biobolehw, biobole, biosapssw, biosapshw, biosaps. These variables were assigned the average values from similar plots (unproductive plots were matched with unproductive plots and reserved plots were matched with reserved plots where the plots had the same first five characters for the ECOSUBCD variable). A minimum of five plots having the same ECOSUBCD string through five characters was required for the plot to be assigned a TSOURCE code of 5. This plot failed the requirements to receive a TSOURCE code of 6.
6	Used for unproductive forest land and/or reserved forest land plots where no tree data are available. Plots with a value of 2 for TSOURCE have imputed values for the following variables: cubic, cubicsw, cubichw, cullsw, cullhw, cull, deadsw, deadhw, dead, biobolesw, biobolehw, biobole, biosapssw, biosapshw, biosaps. These variables were assigned the average values from similar plots (unproductive plots were matched with unproductive plots and reserved plots were matched with

RPA Data Wiz Name Access FIELD NAME	Definition
	reserved plots where the plots had the same first six characters for the ECOSUBCD variable). A minimum of five plots having the same ECOSUBCD string through six characters was required for the plot to be assigned a TSOURCE code of 6.
	96 Hawaii. Values for variables biosapssw, biosapshw, and biosaps were imputed based on the average ratio of biostumptop to biobole for the lower 48 States. Individual tree data were unavailable for computing trees per acre and basal area variables.
	97 Interior Alaska. Values for variables cubic, cubicsw, cubichw, cullsw, cullhw, cull, deadsw, deadhw, dead, biobolesw, biobolehw, biobole, biosapssw, biosapshw, and biosaps, were imputed from information contained on six plots measured in the Northwest Territories.
	98 Productive reserved plots that did not meet requirements for codes 1 through 6. They received the average values from all other productive reserved plots that were measured in their respective State and/or neighboring States (a minimum of five plots was required to develop the average).
	99 Unproductive plots that did not meet requirements for codes 1 through 6. They received the average values from all other unproductive plots that were measured in their respective State and/or neighboring States (a minimum of five plots was required to develop the average). An exception occurs for Florida (332 plots). Information for these 332 plots was derived from a publication by Neal Cost on unproductive forest land.
25. *Mapped CONDPROP in RPA database modified to MAPPED in RPA Data Wiz database	This is a recoded version of CONDPROP (Miles and Vissage, In prep.). CONDPROP values less than 1 were recoded to 1 and indicate that the plot was mapped. CONDPROP values equal to 1 were recoded to 0 and indicate that the plot was not mapped. Code Mapped -1 Missing 0 Not Mapped 1 Mapped
26. *1983 Rural — Urban Continuum URCONT83	Rural/Urban Continuum Codes (updated 5/95) Stock #89021, Economic Research Service, United States Department of Agriculture. References: 1. Butler, Margaret A.; Beale, Calvin L. 1994. Rural-urban continuum codes for metro and nonmetro Counties, 1993. Staff Rep. 9425. Washington, DC: U.S. Department of Agriculture, Economic Research Service, Agriculture and Rural Economy Division. 2. Butler, Margaret A. 1990. Rural-urban continuum codes for metro and nonmetro Counties. Staff Rep. 9028. Washington, DC: U.S. Department of Agriculture, Economic Research Service, Agriculture and Rural Economy Division.
27. *1993 Rural — Urban Continuum URCONT93	For RPA Data Wiz, plots were assigned continuum codes based upon the code associated with their county. The codes in the Economic Research Service database are assigned at the county scale. Code Rural/Urban Continuum 0 Central counties of metropolitan areas of 1 million population or more 1 Fringe counties of metropolitan areas of 1 million population or more 2 Counties in metropolitan areas of 250,000 to 1 million population 3 Counties in metropolitan areas of less than 250,000 population

RPA Data Wiz Name Access FIELD NAME	Definition
	4 Urban population of 20,000 or more, adjacent to a metropolitan area 5 Urban population of 20,000 or more, not adjacent to a metropolitan area 6 Urban population of 2,500 to 19,999, adjacent to a metropolitan area 7 Urban population of 2,500 to 19,999, not adjacent to a metropolitan area 8 Completely rural or less than 2,500 urban population, adjacent to a metropolitan area 9 Completely rural or less than 2,500 urban population, not adjacent to a metropolitan area
28. *Baileys' Ecosection ECOSECTION	Baileys' ecoregions expressed as a six-digit number. It combines the domain, division, province, and section into one numeric code. The corresponding alphanumeric code exists in the field EcosectionTxt, only present in the database used with RPA Data Wiz. The translation from Baileys' alphanumeric ecocode to this integer value was taken from GTR SRS-36 (Rudis 1999) located in the references directory of the RPA Data Wiz CD. Plots were assigned an ecocode using an overlay analysis where plots with fuzzed (usually within a mile of the true location) locations were overlaid onto a Baileys' ecoregion polygon layer. Each plot was assigned the code of the ecoregion it contacted. If a plot did not intersect with a polygon, then it was assigned the ecoregion code of the polygon with the closest centroid. More information is available with the metadata (ecoregs.met or ecoregs.shp.xml in the application directory) of the ecoregs shapefile associated with RPA Data Wiz. Additional information can also be found in the references directory of the installation CD. Baileys' ecosection was not determined for HI or interior AK.
29. *107th Congressional District Code and 108th Congressional District Code CONGCD and CONGCD108	Congressional district codes for the 107th (CONGCD) and 108th (CONGCD108) Congress. A territorial division of a State from which a member of the U.S. House of Representatives is elected. There are 435 congressional districts in the United States apportioned to the States based on population. Each State receives at least one congressional district. The congressional district codes for the 107th and 108th Congress were assigned to each plot (regardless of when it was measured). CONGCD and CONGCD108 are four-digit numbers. The first two digits are the State FIPS code and the last two digits are the congressional district number. Plots were assigned congressional districts using an overlay analysis where plots with fuzzed (usually within a mile of the true location) locations were overlaid onto a congressional district polygon layer. Two overlay analyses were performed, one for the 107th and one for the 108th. Each plot was assigned the code of the congressional district it contacted. If a plot did not intersect with a polygon, then it was assigned the congressional district of the polygon with the closest centroid. If a plot was assigned a CONGCD or CONGCD108 that represented a congressional district from the incorrect State, then a visual inspection was used to assign the congressional district code of the closest polygon in the correct State (indicated by the State FIPS code associated with the plot). This situation occurred with plots near State borders due to the fact that the plot locations are fuzzed. More information is available with the metadata of the cgd107 and cgd108 shapefiles associated with RPA Data Wiz (cgd107.met or cgd107.shp.xml, cgd108.met or cgd108.shp.xml in the application directory). Additional information can also be found in the references directory of the installation CD. The 107th and 108th Congressional Districts were not determined for HI or interior AK.
30. *Hydrological Accounting Unit HUCACCUNIT	The hydrological accounting unit derived from USGS HUC (Hydrologic Unit Maps) attributes. (Region * 10000) + (Subregion * 100) + Accounting Unit is the formula for HUCACCUNIT. Plots were assigned a hydrological accounting unit using an overlay analysis where plots with fuzzed (usually within a mile of the true location) locations were overlaid onto a hydrological accounting unit polygon layer. Each plot was assigned the code of the hydrological accounting unit it contacted. If a plot did not intersect with a polygon, then it was assigned the hydrological accounting unit code of the polygon with the closest centroid. More

RPA Data Wiz Name Access FIELD NAME	Definition
	information is available with the metadata (hucau.met or hucau.shp.xml in the application directory) of the hucau shapefile associated with RPA Data Wiz. Additional information can also be found in the references directory of the installation CD. The hydrological accounting unit was not determined for HI or AK.
31. *Mean Stand DIA 2" Class or Larger STDIAM2CLASS	Mean stand diameter class (2" increments) for all trees ≥ 1" d.b.h. Estimation is by calculating the quadratic mean diameter (except HI and interior AK). Mean stand diameters ≥ 39" d.b.h. are classed as 40" d.b.h. This field is used in the English version of RPA Data Wiz. See appendix D.
32. *Mean Stand DIA 6" Class or Larger STDIAM6CLASS	Mean stand diameter class (2" increments) for all trees ≥ 5" d.b.h. Estimation is by calculating the quadratic mean diameter (except HI and interior AK). Mean stand diameters ≥ 39" d.b.h. are classed as 40" d.b.h. This field is used in the English version of RPA Data Wiz. See appendix D.
33. *Mean Stand DIA 5 cm Class or Larger STDIAM5CLASS	Mean stand diameter class (5-cm increments) for all trees ≥ 3 cm (2.5 cm) d.b.h. Estimation is by calculating the quadratic mean diameter (except HI and interior AK). Mean stand diameters ≥ 98 cm d.b.h. are classed as 100 cm d.b.h. This field is used in the metric version of RPA Data Wiz. See appendix D.
34. *Mean Stand DIA 15 cm Class or Larger STDIAM15CLASS	Mean stand diameter class (5-cm increments) for all trees ≥ 13 cm (12.7 cm) d.b.h. Estimation is by calculating the quadratic mean diameter (except HI and interior AK). Mean stand diameters ≥ 98 cm d.b.h. are classed as 100 cm d.b.h. This field is used in the metric version of RPA Data Wiz. See appendix D.
35. 108th Congressional District Code CONGCD108	Defined with 107th Congressional District Code.

Appendix B
Output Variables (English Version)

These are the definitions for the output variables in the English version of RPA Data Wiz. The corresponding field names in the RPA Data Wiz database, rpadb2002.mdb, are also provided. Most of the data in RPA Data Wiz (db2002.mdb, Access database) originally came from another database, the 2002 RPA Assessment database. Most of the definitions presented here are modified versions of those in *The 2002 RPA Plot Summary Database Users Manual Version 1.0* (Miles and Vissage, In prep.) associated with the 2002 RPA Assessment database. Field definitions have been modified to work in RPA Data Wiz. In the original 2002 RPA Assessment database, these output variables were expressed on a per acre basis. To speed up computations in RPA Data Wiz, these output variables, except area, were multiplied by their corresponding expansion factors (VEF) to come up with totals for each plot or record in the RPA Data Wiz database. The volume expansion factor, or VEF, is the number of acres the sample plot represents for making total estimates of volume, number of trees, and biomass. Sometimes other variables are mentioned in this appendix. Please refer to appendix A for definitions of selection variables like TSOURCE. Refer to appendix D for definitions of size classes. D.b.h. or diameter at breast height is mentioned in this appendix. It is defined as the stem diameter, outside bark, at a point 4.5 feet (137.16 cm) above ground. Any other variables mentioned but not defined in this appendix are defined by Miles and Vissage (In prep.).

	RPA Data Wiz Name **Access FIELD NAME**	**Definition**
1.	Area (acres) AEF	Area Expansion Factor. The number of acres the sample plot represents for making current estimates of area. The sum of AEF over all plot records for a particular State is the total land and water area of the State as calculated by the Bureau of Census.
2.	SW Board Foot Volume – International 1/4 BDFTSW	Softwood board foot volume (International 1/4" rule). The net volume (board feet) of softwood growing stock represented per plot. Trees must be ≥ 9 inches d.b.h. The minimum saw log top is 7" diameter outside bark. Available only for timberland plots(forcode = 1).
3.	HW Board Foot Volume – International 1/4 BDFTHW	Hardwood board foot volume (International 1/4" rule). The net volume (board feet) of hardwood growing stock represented per plot. Trees must be ≥ 11 inches d.b.h. The minimum saw log top is 9" diameter outside bark. Available only for timberland plots (forcode = 1).
4.	Board Foot Volume – International 1/4 BDFT	Board foot volume (International 1/4" rule). The net volume (board feet) of softwood and hardwood growing stock represented per plot. Available only for timberland plots (forcode = 1).
5.	SW Cubic Foot Volume CUBICSW	Softwood cubic foot volume. Net volume (cubic feet) of softwood growing stock represented per plot. Trees must be ≥ 5 inches d.b.h. The minimum top is 4" diameter outside bark. Available for all forest land plots. Values are imputed where the value of the variable TSOURCE is not equal to 1 (TSOURCE may not be equal to 1 for some reserved and unproductive forest land).

RPA Data Wiz Name Access FIELD NAME	Definition
6. HW Cubic Foot Volume CUBICHW	Hardwood cubic foot volume. Net volume (cubic feet) of hardwood growing stock represented per plot. Trees must be ≥ 5 inches d.b.h. The minimum top is 4" diameter outside bark. Values are imputed where the value of the variable TSOURCE is not equal to 1 (TSOURCE may not be equal to 1 for some reserved and unproductive forest land).
7. Cubic Foot Volume CUBIC	Cubic foot volume. Net volume (cubic feet) of hardwood growing stock represented per plot. Trees must be ≥ 5 inches d.b.h. The minimum top is 4" diameter outside bark. Values are imputed where the value of the variable TSOURCE is not equal to 1 (TSOURCE may not be equal to 1 for some reserved and unproductive forest land).
8. SW Live Cull Volume CULLSW	Softwood live cull volume. Net volume (cubic feet) of live cull softwood trees represented per plot; trees must be ≥ 5 inches d.b.h. Available for all forest land plots. Values are imputed where the value of the variable TSOURCE is not equal to 1 (TSOURCE may not be equal to 1 for some reserved and unproductive forest land).
9. HW Live Cull Volume CULLHW	Hardwood live cull volume. Net volume (cubic feet) of live cull hardwood trees represented per plot; trees must be ≥ 5 inches d.b.h. Available for all forest land plots. Values are imputed where the value of the variable TSOURCE is not equal to 1 (TSOURCE may not be equal to 1 for some reserved and unproductive forest land).
10. Live Cull Volume CULL	All live cull volume. Net volume (cubic feet) of all live cull trees represented per plot; trees must be ≥ 5 inches d.b.h. Available for all forest land plots. Values are imputed where the value of the variable TSOURCE is not equal to 1 (TSOURCE may not be equal to 1 for some reserved and unproductive forest land).
11. SW Sound Dead Volume DEADSW	Salvable dead softwood. Net volume (cubic feet) of merchantable sound dead softwood trees represented per plot. Merchantability is determined by regional standards. Available for all forest land plots. Values are imputed where the value of the variable TSOURCE is not equal to 1 (TSOURCE may not be equal to 1 for some reserved and unproductive forest land).
12. HW Sound Dead Volume DEADHW	Salvable dead hardwood. Net volume (cubic feet) of merchantable sound dead hardwood trees represented per plot. Merchantability is determined by regional standards. Available for all forest land plots. Values are imputed where the value of the variable TSOURCE is not equal to 1 (TSOURCE may not be equal to 1 for some reserved and unproductive forest land).
13. Sound Dead Volume DEAD	Salvable dead. Net volume (cubic feet) of merchantable sound dead trees represented per plot. Merchantability is determined by regional standards. Available for all forest land plots. Values are imputed where the value of the variable TSOURCE is not equal to 1 (TSOURCE may not be equal to 1 for some reserved and unproductive forest land).

RPA Data Wiz Name Access FIELD NAME	Definition
14. SW Mortality MORTSW	Softwood mortality. Volume (cubic feet) of annual mortality of softwood growing stock represented per plot; trees must be ≥ 5 inches d.b.h. Available only for timberland plots.
15. HW Mortality MORTHW	Hardwood mortality. Volume (cubic feet) of annual mortality of hardwood growing stock represented per plot; trees must be ≥ 5 inches d.b.h. Available only for timberland plots.
16. Mortality MORT	Mortality. Volume (cubic feet) of annual mortality of growing stock trees represented per plot; trees must be ≥ 5 inches d.b.h. Available only for timberland plots.
17. SW Netgrowth GROWTHSW	Net annual softwood growth. Net annual growth (cubic feet) of softwood growing stock represented per plot. Net growth is gross growth minus mortality and negative cull increment plus positive cull increment. Negative cull increment occurs when growing-stock trees at time zero are reclassified as cull trees at time one. Positive cull increment is when trees classified as cull at time zero are reclassified as growing stock at time one. Available only for timberland plots.
18. HW Netgrowth GROWTHHW	Net annual hardwood growth. Net annual growth (cubic feet) of hardwood growing stock represented per plot. Net growth is gross growth minus mortality and negative cull increment plus positive cull increment. Negative cull increment occurs when growing-stock trees at time zero are reclassified as cull trees at time one. Positive cull increment is when trees classified as cull at time zero are reclassified as growing stock at time one. Available only for timberland plots.
19. Netgrowth GROWTH	Net annual growth. Net annual growth (cubic feet) of softwood growing stock represented per plot. Net growth is gross growth minus mortality and negative cull increment plus positive cull increment. Negative cull increment occurs when growing-stock trees at time zero are reclassified as cull trees at time one. Positive cull increment is when trees classified as cull at time zero are reclassified as growing stock at time one. Available only for timberland plots.
20. SW Gross Biomass 6" Class or Larger BIOBOLESW	Softwood biomass in the bole. Total gross biomass (including bark) represented per plot in dry pounds of all live softwood trees 5 inches d.b.h. or larger from a 1-foot stump to a minimum 4-inch top (diameter outside bark of the central stem).
21. HW Gross Biomass 6" Class or Larger BIOBOLEHW	Hardwood biomass in the bole. Total gross biomass (including bark) represented per plot in dry pounds of all live hardwood trees 5 inches d.b.h. or larger from a 1-foot stump to a minimum 4-inch top (diameter outside bark of the central stem).
22. Gross Biomass 6" Class or Larger BIOBOLE	Biomass in the bole. Total gross biomass (including bark) represented per plot in dry pounds of all live trees 5 inches d.b.h. or larger from a 1-foot stump to a minimum 4-inch top (diameter outside bark of the central stem).

RPA Data Wiz Name Access FIELD NAME	Definition
23. SW Gross Aboveground Biomass 2 to 6" Class BIOSAPSSW	Softwood sapling biomass. Total gross aboveground biomass (including bark) represented per plot in dry pounds of all live softwood trees from 1 to 5 inches d.b.h., including tops and limbs.
24. HW Gross Aboveground Biomass 2 to 6" Class BIOSAPSHW	Hardwood sapling biomass. Total gross aboveground biomass (including bark) represented per plot in dry pounds of all live hardwood trees from 1 to 5 inches d.b.h., including tops and limbs.
25. Gross Aboveground Biomass 2 to 6" Class BIOSAPS	Sapling biomass. Total gross aboveground biomass (including bark) represented per plot in dry pounds of all live trees from 1 to 5 inches d.b.h., including tops and limbs.
26. Number Live Trees 6" Class or Larger TPA_5	Number of live trees 5 inches in diameter and larger represented per plot. Only calculated for timberland plots (FORCODE = 1). Diameters are usually measured at d.b.h. except for certain woodland species where diameters are measured at the root collar.
27. Number Live Trees 2" Class or Larger TPA_1	Number of live trees 1 inch in diameter and larger represented per plot. Only calculated for timberland plots (FORCODE = 1). Diameters are usually measured at d.b.h. except for certain woodland species where diameters are measured at the root collar.
28. SW Biomass-Stumps and Tops 6" Class or Larger BIOSTUMPTOPSW	Biomass (pounds) in the stump and tops of live softwood trees 5 inches in diameter and larger represented per plot. Difference between total dry biomass and merchantable dry biomass on live trees 5 inches in diameter and larger.
29. HW Biomass-Stumps and Tops 6" Class or Larger BIOSTUMPTOPHW	Biomass (pounds) in the stump and tops of live hardwood trees 5 inches in diameter and larger represented per plot. Difference between total dry biomass and merchantable dry biomass on live trees 5 inches in diameter and larger.
30. Biomass-Stumps and Tops 6" Class or Larger BIOSTUMPTOP	Biomass (pounds) in the stump and tops of live trees 5 inches in diameter and larger represented per plot. Difference between total dry biomass and merchantable dry biomass on live trees 5 inches in diameter and larger.
31. SW Salvable Dead Biomass 6" Class or Larger BIOSALVDEADSW	Total gross biomass (dry weight in pounds) for salvable dead softwood trees represented per plot. The total aboveground biomass of trees 5 inches in diameter and larger, including all tops and limbs (but excluding foliage).

RPA Data Wiz Name Access FIELD NAME	Definition
32. HW Salvable Dead Biomass 6" Class or Larger BIOSALVDEADHW	Total gross biomass (dry weight in pounds) dry weight for salvable dead hardwood trees represented per plot. The total aboveground biomass of trees 5 inches in diameter and larger, including all tops and limbs (but excluding foliage).
33. Salvable Dead Biomass 6" Class or Larger BIOSALVDEAD	Total gross biomass (dry weight in pounds) dry weight for salvable dead trees represented per plot. The total aboveground biomass of trees 5 inches in diameter and larger, including all tops and limbs (but excluding foliage).

Appendix C
Output Variables (Metric Version)

These are the definitions for the output variables in the metric version of RPA Data Wiz. The corresponding field names in the RPA Data Wiz database, rpadb2002met.mdb, are also provided. Most of the data in RPA Data Wiz (rpadb2002met.mdb, Access database) originally came from another database, the 2002 RPA Assessment database. Most of the definitions presented here are modified versions of those in *The 2002 RPA Plot Summary Database Users Manual Version 1.0* (Miles and Vissage, In prep.) associated with the 2002 RPA Assessment database. Field definitions have been modified to work in RPA Data Wiz. In the original 2002 RPA Assessment database, these output variables were expressed on a per acre (not hectare) basis. To speed up computations in RPA Data Wiz, these output variables, except area, were multiplied by their corresponding expansion factors (VEF) to come up with totals for each plot or record in the RPA Data Wiz database. The volume expansion factor, or VEF, is the number of acres the sample plot represents for making total estimates of volume, number of trees, and biomass. After calculating the output variable totals per plot, a metric conversion factor was applied to the English units. Acres were converted to hectares (acres * 0.404686). Cubic-foot values were converted to cubic meters (cubic feet * 0.028317). Pounds were converted to metric tons (pounds * 0.000453592). Sometimes other variables are mentioned in this appendix. Please refer to appendix A for definitions of selection variables like TSOURCE. Refer to appendix D for definitions of size classes. Centimeters mentioned in the definitions below are rounded to the nearest integer. Inches were converted to centimeters using 2.54 as the conversion factor. D.b.h. or diameter at breast height is mentioned in this appendix. It is defined as the stem diameter, outside bark, at a point 4.5 feet (137.16 cm) above ground. Any other variables mentioned but not defined in this appendix are defined by Miles and Vissage (In prep.).

RPA Data Wiz Name Access FIELD NAME	Definition
1. Area (hectares) AEF	Area Expansion Factor. The number of hectares the sample plot represents for making current estimates of area. The sum of AEF over all plot records for a particular State is the total land and water area of the State as calculated by the Bureau of Census.
2. SW Cubic Meter Volume CUBICSW	Softwood cubic foot volume. Net volume (cubic meters) of softwood growing stock represented per plot. Trees must be ≥ 13 cm d.b.h. The minimum top is 10 cm diameter outside bark. Available for all forest land plots. Values are imputed where the value of the variable TSOURCE is not equal to 1 (TSOURCE may not be equal to 1 for some reserved and unproductive forest land).
3. HW Cubic Meter Volume CUBICHW	Hardwood cubic foot volume. Net volume (cubic meters) of hardwood growing stock represented per plot. Trees must be ≥ 13 cm d.b.h. The minimum top is 10 cm diameter outside bark. Values are imputed where the value of the variable TSOURCE is not equal to 1 (TSOURCE may not be equal to 1 for some reserved and unproductive forest land).

RPA Data Wiz Name Access FIELD NAME	Definition
4. Cubic Meter Volume CUBIC	Cubic foot volume. Net volume (cubic meters) of hardwood growing stock represented per plot. Trees must be ≥ 13 cm d.b.h. The minimum top is 10 cm diameter outside bark. Values are imputed where the value of the variable TSOURCE is not equal to 1 (TSOURCE may not be equal to 1 for some reserved and unproductive forest land).
5. SW Live Cull Volume CULLSW	Softwood live cull volume. Net volume (cubic meters) of live cull softwood trees represented per plot; trees must be ≥ 13 cm d.b.h. Available for all forest land plots. Values are imputed where the value of the variable TSOURCE is not equal to 1 (TSOURCE may not be equal to 1 for some reserved and unproductive forest land).
6. HW Live Cull Volume CULLHW	Hardwood live cull volume. Net volume (cubic meters) of live cull hardwood trees represented per plot; trees must be ≥ 13 cm d.b.h. Available for all forest land plots. Values are imputed where the value of the variable TSOURCE is not equal to 1 (TSOURCE may not be equal to 1 for some reserved and unproductive forest land).
7. Live Cull Volume CULL	All live cull volume. Net volume (cubic meters) of all live cull trees represented per plot; trees must be ≥ 13 cm d.b.h. Available for all forest land plots. Values are imputed where the value of the variable TSOURCE is not equal to 1 (TSOURCE may not be equal to 1 for some reserved and unproductive forest land).
8. SW Sound Dead Volume DEADSW	Salvable dead softwood. Net volume (cubic meters) of merchantable sound dead softwood trees represented per plot. Merchantability is determined by regional standards. Available for all forest land plots. Values are imputed where the value of the variable TSOURCE is not equal to 1 (TSOURCE may not be equal to 1 for some reserved and unproductive forest land).
9. HW Sound Dead Volume DEADHW	Salvable dead hardwood. Net volume (cubic meters) of merchantable sound dead hardwood trees represented per plot. Merchantability is determined by regional standards. Available for all forest land plots. Values are imputed where the value of the variable TSOURCE is not equal to 1 (TSOURCE may not be equal to 1 for some reserved and unproductive forest land).
10. Sound Dead Volume DEAD	Salvable dead. Net volume (cubic meters) of merchantable sound dead trees represented per plot. Merchantability is determined by regional standards. Available for all forest land plots. Values are imputed where the value of the variable TSOURCE is not equal to 1 (TSOURCE may not be equal to 1 for some reserved and unproductive forest land).
11. SW Mortality MORTSW	Softwood mortality. Volume (cubic meters) of annual mortality of softwood growing stock represented per plot; trees must be ≥ 13 cm d.b.h. Available only for timberland plots.
12. HW Mortality MORTHW	Hardwood mortality. Volume (cubic meters) of annual mortality of hardwood growing stock represented per plot; trees must be ≥ 13 cm d.b.h. Available only for timberland plots.

RPA Data Wiz Name Access FIELD NAME	Definition
13. Mortality MORT	Mortality. Volume (cubic meters) of annual mortality of growing-stock trees represented per plot; trees must be ≥ 13 cm d.b.h. Available only for timberland plots.
14. SW Netgrowth GROWTHSW	Net annual softwood growth. Net annual growth (cubic meters) of softwood growing stock represented per plot. Net growth is gross growth minus mortality and negative cull increment plus positive cull increment. Negative cull increment occurs when growing-stock trees at time zero are reclassified as cull trees at time one. Positive cull increment is when trees classified as cull at time zero are reclassified as growing stock at time one. Available only for timberland plots.
15. HW Netgrowth GROWTHHW	Net annual hardwood growth. Net annual growth (cubic meters) of hardwood growing stock represented per plot. Net growth is gross growth minus mortality and negative cull increment plus positive cull increment. Negative cull increment occurs when growing-stock trees at time zero are reclassified as cull trees at time one. Positive cull increment is when trees classified as cull at time zero are reclassified as growing stock at time one. Available only for timberland plots.
16. Netgrowth GROWTH	Net annual growth. Net annual growth (cubic meters) of softwood growing stock represented per plot. Net growth is gross growth minus mortality and negative cull increment plus positive cull increment. Negative cull increment occurs when growing-stock trees at time zero are reclassified as cull trees at time one. Positive cull increment is when trees classified as cull at time zero are reclassified as growing stock at time one. Available only for timberland plots.
17. SW Gross Biomass 15 cm Class or Larger BIOBOLESW	Softwood biomass in the bole. Total gross biomass (including bark) represented per plot in dry metric tons of all live softwood trees 13 cm d.b.h. or larger from a 30-cm stump to a minimum 10-cm top (diameter outside bark of the central stem).
18. HW Gross Biomass 15 cm Class or Larger BIOBOLEHW	Hardwood biomass in the bole. Total gross biomass (including bark) represented per plot in dry metric tons of all live hardwood trees 13 cm d.b.h. or larger from a 30-cm stump to a minimum 10-cm top (diameter outside bark of the central stem).
19. Gross Biomass 15 cm Class or Larger BIOBOLE	Biomass in the bole. Total gross biomass (including bark) represented per plot in dry metric tons of all live trees 13 cm d.b.h. or larger from a 30-cm stump to a minimum 10-cm top (diameter outside bark of the central stem).
20. SW Gross Aboveground Biomass 5 to 15 cm Class BIOSAPSSW	Softwood sapling biomass. Total gross aboveground biomass (including bark) represented per plot in dry metric tons of all live softwood trees from 3 to 13 cm d.b.h., including tops and limbs.

RPA Data Wiz Name Access FIELD NAME	Definition
21. HW Gross Aboveground Biomass 5 to 15 cm Class BIOSAPSHW	Hardwood sapling biomass. Total gross aboveground biomass (including bark) represented per plot in dry metric tons of all live hardwood trees from 3 to 13 cm d.b.h., including tops and limbs.
22. Gross Aboveground Biomass 5 to 15 cm Class BIOSAPS	Sapling biomass. Total gross aboveground biomass (including bark) represented per plot in dry metric tons of all live trees from 3 to 13 cm d.b.h., including tops and limbs.
23. Number Live Trees 15 cm Class or Larger TPA_15	Number of live trees 13 cm in diameter and larger represented per plot. Only calculated for timberland plots (forcode = 1). Diameters are usually measured at d.b.h. except for certain woodland species where diameters are measured at the root collar.
24. Number Live Trees 5 cm Class or Larger TPA_5	Number of live trees 3 cm in diameter and larger represented per plot. Only calculated for timberland plots (forcode = 1). Diameters are usually measured at d.b.h. except for certain woodland species where diameters are measured at the root collar.
25. SW Biomass-Stumps and Tops 15 cm Class or Larger BIOSTUMPTOPSW	Biomass (metric tons) in the stump and tops of live softwood trees 13 cm in diameter and larger represented per plot. Difference between total dry biomass and merchantable dry biomass on live trees 13 cm in diameter and larger.
26. HW Biomass-Stumps and Tops 15 cm Class or Larger BIOSTUMPTOPHW	Biomass (metric tons) in the stump and tops of live hardwood trees 13 cm in diameter and larger represented per plot. Difference between total dry biomass and merchantable dry biomass on live trees 13 cm in diameter and larger.
27. Biomass-Stumps and Tops 15 cm Class or Larger BIOSTUMPTOP	Biomass (metric tons) in the stump and tops of live trees 13 cm in diameter and larger represented per plot. Difference between total dry biomass and merchantable dry biomass on live trees 13 cm in diameter and larger.
28. SW Salvable Dead Biomass 15 cm Class or Larger BIOSALVDEADSW	Total gross biomass (dry weight in metric tons) for salvable dead softwood trees represented per plot. The total aboveground biomass of trees 13 cm diameter or larger, including all tops and limbs (but excluding foliage).

RPA Data Wiz Name Access FIELD NAME	Definition
29. HW Salvable Dead Biomass 15 cm Class or Larger BIOSALVDEADHW	Total gross biomass (dry weight in metric tons) for salvable dead hardwood trees represented per plot. The total aboveground biomass of trees 13 cm diameter or larger, including all tops and limbs (but excluding foliage).
30. Salvable Dead Biomass 15 cm Class or Larger BIOSALVDEAD	Total gross biomass (dry weight in metric tons) for salvable dead trees represented per plot. The total aboveround biomass of trees 13 cm diameter or larger, including all tops and limbs (but excluding foliage).

Appendix D
English and Metric Size Classes

These are the size classes as they appear in RPA Data Wiz. The numbers in the Metric Size Class Range column are rounded to the nearest integer.

English size class	English size class range (inches)	Metric size class	Metric size class range (cm)
0	0.0	0	0
2	1.0 - 2.9	5	3 - 7
4	3.0 - 4.9	10	8 - 12
6	5.0 - 6.9	15	13 - 17
8	7.0 - 8.9	20	18 - 22
10	9.0 - 10.9	25	23 - 27
12	11.0 - 12.9	30	28 - 32
14	13.0 - 14.9	35	33 - 37
16	15.0 - 16.9	40	38 - 42
18	17.0 - 18.9	45	43 - 47
20	19.0 - 20.9	50	48 - 52
22	21.0 - 22.9	55	53 - 57
24	23.0 - 24.9	60	58 - 62
26	25.0 - 26.9	65	63 - 67
28	27.0 - 28.9	70	68 - 72
30	29.0 - 30.9	75	73 - 77
32	31.0 - 32.9	80	78 - 82
34	33.0 - 34.9	85	83 - 87
36	35.0 - 36.9	90	88 - 92
38	37.0 - 38.9	95	93 - 97
40	39 +	100	98 +

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RPA Data Wiz is a computer application used to create summary tables, graphs, and maps of Resource Planning Act (RPA) Assessment forest information (English or metric units). Volumes for growing stock, live cull, dead salvable, netgrowth, and mortality can be estimated. Acreage, biomass, and tree count estimates are also available.

KEY WORDS: RPA, assessment, forest, inventory, GIS, maps, metric, database.

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